

KIT COMPARISON

(BLOWZILLA 2.2L vs. 1.7L)

One of the most frequently asked questions regarding the Kenne Bell 4.6 kits is "What is the difference between the kits?" and "Which kit is best for my application?" The 4.6 GT Mustang 1.7L 9 psi intercooled kit is one of the best, most successful and dominating kits ever engineered by Kenne Bell. It offers tremendous power and torque gains at any rpm - up to 186HP at 9 psi. 431HP vs 245 stock is like a 186HP shot of Nitrous any time you mash the gas. And it looks even better than OEM kits.

The single most important consideration when contemplating the 2.2L and it's 700+ potential is "Will my motor handle all this power?" Absolutely not. We've said many times that 450HP is about maximum for the 2V rods. That's why we kept the power limit at 9 psi and 431 (with 90mm Meter, CAK, 75mm Throttle Body/Big Tube Kit). Note: All HP numbers are rear wheel. Divide by .85 for engine HP. And keep in mind that an '03-'04 Cobra puts out only 360 at 9 psi. The 4.6 2V with a Kenne Bell Twin Screw is a real performer. Ask anyone who owns one. However, if your plans are to make over 450HP by adding heads, cams and/or increasing boost, forget it. Upgrade to forged rods and 8-8.5 pistons.

The 2.2L is the exact same new profile Twin Screw and inlet manifold that we use on the 700HP+ '03 Cobras. On a 4.6 with heads, cams and 8.1 compression, our test car makes 30 more HP than our comparably equipped Cobra, both at 20 psi. It'll kick out 20 psi and make 643HP with an AUTOMATIC TRANS and a rich conservative tune. Whereas the 1.7L is an "everything you need" kit, the 2.2L demands various stages of upgrades depending on your HP goals. Read our Tech Tips to see what's necessary to make 682HP @ 20 psi.

Not everyone is looking for 20 psi and 682HP with all the accompanying parts costs. If your 2.2L goal is around 530-540 with only upgraded 8.1 forged pistons and rods on good pump gas at 14-15 psi, this can be achieved without the cams, heads and headers (we've only seen 8HP from headers). Just drop in the Cobra tank and pumps with 55lb injectors and the stock fuel lines. THAT is still A LOT OF HP for the street. Enough to run 120 in the low to mid 11's. Again - a stock '03 Cobra is 360. Add the Kenne Bell 2.2L at 15 psi and it makes 560HP! Our dyno tests indicate that the 4.6 GT 2V engine with heads and cams makes 30 more HP (590HP) than the Cobra at 15 psi. That should give you an indication of the 2V potential.

TUNING OVERVIEW 2.2L KITS

To summarize, the BLOWZILLA 2.2L is recommended after 450HP. It is equally at home anywhere on a GT 4.6 between 450-682HP and 9-20 psi. And it takes a back seat to no supercharger in this power range. Boost, timing and AF ratio will determine the necessary fuel octane.

SPECIAL TUNING NOTE: The 2.2L kit is a "Tuner Kit." It requires custom tuning on a Dynojet and a competent experienced tuner. It is a kick ass 500-700HP kit.

There are simply far too many combinations of meters, injectors, headers, cams, cool air kits, throttle bodies, fuel pressure, fuel etc. Kenne Bell cannot possibly calibrate chips for all these and other unknown variables nor can we support these individual tunes over the phone or email.

TUNING OVERVIEW 6 PSI, 9 PSI 1.7L KITS

By contrast, our 9 psi intercooled kits are Kenne Bell calibrated with Kenne Bell Injectors, Cool Air Kit, 75mm Big Tube Kit and 80mm or 90mm Meter.

Contrary to what you may have heard, the calibration/tune (chip) we supply with our kits is dead accurate and repeatable from car to car. The cars DO NOT vary as some would lead you to believe. It is the "other" mix and match products that create the tuning or driveability issues. Then there's those air fuel ratio meter variations. How can we be sure? We've sold hundreds of 9 psi kits that perform flawlessly. We ask for and receive feedback. We KNOW what causes problems with our kits.

OVERVIEW

The 2.2L kit is basically our '03-'04 Cobra Kit with the higher capacity 2.2L BLOWZILLA and Cobra inlet manifold and the "Big Oval" Throttle Body. None of the parts between the 1.7L and 2.2L kits are interchangeable. The 2.2L kit is not an upgrade. It is a completely different kit than the 1.7L.

In summary, the 2.2L kit will require the following upgrades and changes vs. the 1.7L kit;

- ① 2.2L kit with 1" longer BLOWZILLA Twin Screw and '03 Cobra Inlet Manifold.
- ② Cobra R hood.
- ③ '03 Cobra dual pumps and gas tank w/Kenne Bell BOOST-A-PUMP™.
- ④ Dual fuel lines (another 1/4" line for HP levels above 650).
- ⑤ 55, 60 or 65lb injectors vs. 36lb for the 1.7L kit.
- ⑥ 8 rib pulley and belt system (see literature).
- ⑦ Cobra throttle body and inlet tube (included in 2.2L kit).
- ⑧ Electric water pump (8.5" crank pulley only). 7.5" OK with 5" water pump pulley. 4" loses 19HP.
- ⑨ Forged rods and 8-8.5 pistons.
- ⑩ Custom tune (2.2L kits only).

Note: Our 1.7L 9 psi kit chips are dead accurate and do not require custom tuning.

We KNOW what combination of Kenne Bell MAF meter, throttle body, cool air kit, inlet tube and injectors are being used. They're all Kenne Bell, so we've perfected a cal (chip) for this combination - and we KNOW how to tune our kits. So don't have any visions of improving the HP on this kit - unless, of course, you choose to 1. advance timing or 2. lean out the AF ratio. Both are optimized in the SHOOT OUT mode of the Kenne Bell SWITCH CHIP®.