

What NOT to do . . .

At Kenne Bell, we strongly believe the best decisions are only possible when all the facts are made available. We therefore place considerable emphasis on the education and support of Kenne Bell customers which should be obvious by the amount of technical information posted on our website.

There is another Kenne Bell customer obligation that we feel is important - avoiding future problems for our customers by making them aware of WHAT NOT TO DO as would relate to the preventative maintenance, tuning, dyno data, modifications, other products, installation, etc of Kenne Bell Supercharger Kits. As always, our primary goal is satisfied customers.

- Never modify, re-route, re-design or substitute ANYTHING in a Kenne Bell kit without consulting us first. We engineered and calibrated the kit. We know it best.
- Do not limit your information to opinions, theories and bench racing. Also consider information that is derived from actual controlled testing and experience (see “Jim Bell’s Supercharged/Turbocharged Performance Guide” at <http://www.kennebell.net/techinfo/general-info/jimbells-supercharged-perf-guide.pdf>).
- Never jump to a decision and assume that the Kenne Bell supercharger is the problem and not one or all of the “other” products - or the installation. Always remember that the supercharger is merely a couple of rotors that increase engine boost at wide open throttle. If the supercharger produces boost, it has done it’s job, so look elsewhere.
- Do not assume that your problem is the “chip - or the computer has gone bad” when one can’t solve an engine or trans problem. We’ve only seen 3 defective ECM’s in 14 years.
- Never assume other products or product concepts that supposedly “work” are not the problem. The first question our tech people ask when a customer calls about ANY problem is “Tell us what else you have changed - ANYTHING YOU HAVE CHANGED” - and 9 out of 10 times THAT is the problem.
- Do not change, modify or replace any part that doesn’t make HP or increase reliability. *“If it ain’t broke, don’t fix it.”*
Smokey Yunick
- Never use a “hot air” exposed underhood filter. See “Warning - Hot Air Underhood Exposed Filters & Kits. How They Can Damage Your Supercharger & Engine” at:
<http://www.kennebell.net/techinfo/general-info/HotAirWARNING.pdf>).
- Never use mass air meter “adjustors” or “tuners.”
- Never relocate or rotate a mass air meter from it’s original recommended position.
- Do not replace any mass air meter without totally re-calibrating the transfer function (see “A Note Regarding Aftermarket Mass Air Meters at <http://www.kennebell.net/techinfo/general-info/anote-regarding-massair-meters.pdf>).
- Do not use throttle body or “plenum” spacers. They don’t make even 1HP on our kits.
- Never substitute aluminum supercharger pulleys for genuine Kenne Bell steel pulleys. This voids the warranty as they can damage the supercharger. Do not modify Kenne Bell pulleys in any way.
- Do not overfill your Kenne Bell supercharger with oil. It will damage the supercharger.
- Do not believe all those exaggerated or generic “up to 20-50HP” ads. If it isn’t a back to back controlled test on your specific vehicle, it’s probably misleading. See “Supercharging vs. Conventional Bolt Ons” at:
<http://www.kennebell.net/techinfo/general-info/supercharging-vs-conventional.pdf>
- Do not add up all those “up to’s” and assume their accumulative total will be accurate. It rarely, if ever, is.

- Do not believe that all engines are different so you must “custom tune” or “re-tune” your Kenne Bell kit.
- Do not port your supercharger. We have hundreds of hours of testing. If it would increase HP, we would have done it.
- Don’t be duped into believing there is a “3rd dimension” of performance tuning. ONLY 1.) air fuel ratio and 2.) ignition timing can increase HP. The rest is BS! We know what the ideal settings are and we are totally in tune with all our kit calibrations (see “Do I need my Kenne Bell Supercharger Kit Re-Tuned?” at http://www.kennebell.net/techinfo/general-info/Supercharger_ReTuned.pdf).
- Don’t necessarily believe that “seeing is believing” with a dyno test. There are many variables to consider.
- Do not believe that air fuel ratio and tweaking ignition timing is all there is to a calibration. They are the two that make HP. There is also DRIVEABILITY (see “Dyno Testing Variables and Air Fuel Ratio Readings - The Pitfalls & Problems” at <http://www.kennebell.net/techinfo/general-info/DynoTestVariables.pdf>).
- Do not attempt to analyze any engine or transmission issue without a scan tool. That’s what they are for.
- NEVER - NEVER attempt to “tune” or “fix” a vacuum leak, defective sensor, worn out component, “other product” problem etc. with a “re-calibration” or “new tune.” You are wasting your money. It is impossible to repair a failed sensor or alternator with a “custom tune.”
NOTE: THE NUMBER ONE DRIVEABILITY PROBLEM WITH ANY NEW VEHICLE IS VACUUM LEAKS.
- Do not use chemical sprays to detect the most common problem - vacuum leaks. USE A SMOKE DETECTOR like the real pros use.
- If dyno tuning your vehicle, NEVER rely on ANY “cheapie wide band” air fuel ratio device (dyno or stand alone) that cannot be calibrated before being used on your vehicle (see “Do I Need My Kenne Bell Supercharger Kit Re-Tuned?” at http://www.kennebell.net/techinfo/general-info/Supercharger_ReTuned.pdf).
- NEVER rely on the accuracy of ANY tail pipe sniffer style air fuel ratio devices to tune your car (see “Dyno Testing Variables and Air Fuel Ratio Readings - The Pitfalls & Problems” at <http://www.kennebell.net/techinfo/general-info/DynoTestVariables.pdf>).
- NEVER assume that the AF ratio measured on a dyno - even with an OEM quality device - is the same as it will be on the street. IT WILL NOT BE.
- NEVER assume the Kenne Bell Supercharger Kit calibration is wrong because some dyno’s \$38 cheapie un-calibratable “wide band” sensor doesn’t agree with the Kenne Bell stated calibration. The most commonly used dyno “wide band” O₂ sensor is the \$38 production Volkswagen Jetta made by Bosch. WE USE AN OEM QUALITY AIR FUEL MEASURING SYSTEM just like Ford, GM, Chrysler etc. This is currently our customers number one problem. And if anyone is getting tired of hearing us complain about inaccurate dyno AF sensors, then go ahead and get your car dynoed, and then YOU can wonder whether the sensor tuned YOUR car to a pig rich or dangerously lean AF ratio. Not a good feeling, is it? (see “Dyno Testing Variables and Air Fuel Ratio Readings - The Pitfalls & Problems” at <http://www.kennebell.net/techinfo/general-info/DynoTestVariables.pdf>).
- Do not allow custom tuners to alter the rpm shift points or top speed and rpm limiters in the Kenne Bell supercharger kit calibration. This can over rev and damage your engine and/or supercharger. Again, Kenne Bell should be the best judge of what is good or bad for our supercharger kits (see “Do I need my Kenne Bell Supercharger Kit Re-Tuned?” at http://www.kennebell.net/techinfo/general-info/Supercharger_ReTuned.pdf).
- Do not increase the boost of a Kenne Bell kit unless it is recommended by us! If there are special circumstances, such as using racing fuel, give us a call for specific requirements for pulley, belt, fuel, ignition etc.
- Do not let yourself be talked into a “re-calibration” if your engine pings. If it didn’t ping before, it shouldn’t ping now - unless there is a vacuum leak or some engine part or sensor has experienced a routine failure. So fix it. Why would you want to pay someone to screw with a tune that works only to fix a part that doesn’t? Doesn’t it make more sense to instead find and fix the defective part? And when you do fix the defective part, you’ll have to re-tune the car to the new part(s).

- Do not tap into wires, particularly sensor or ignition related wires, without prior knowledge of the consequences.
- Do not use complex CD ignition systems that require dozens of wires and many hours of labor to install when a simple easy to install one wire voltage modifier/regulator system, like the Kenne Bell BOOST-A-SPARK™, will do a better job. Wire connections can create serious problems.
- Never replace or upgrade fuel pumps in lieu of the Kenne Bell BOOST-A-PUMP™ supplied in our kits (see “Fuel Pump Figuring” at <http://www.kennebell.net/media/articles/FUELPUMP.pdf>).
- Do not believe that “bigger injectors make more power.” Wrong. Power only increases if the engine is lacking fuel. A 36, 42 and 60 will all make 500HP.

SUMMARY

Kenne Bell is a hi-tech company rich in engineering heritage, supercharger experience and all phases of high performance products and tuning. Above all, we believe that we know our supercharger kits, their tuning limitations and the related product applications better than anyone else.

At Kenne Bell, we engineer and in-house calibrate supercharger kits for specific vehicle applications and fuel octane. Our objective is perfection in design and trouble free operation. Therefore, we cannot - and will not - endorse or encourage tuners or other suppliers to modify or “improve” in any way, the unique and complex calibration of a kit that they are not totally familiar with. Therefore, our position is to recommend against our customers allowing anyone to modify or tweak a Kenne Bell kit or it’s calibration. If our customers do have an issue with our kits, then by all means, give us a call and let’s discuss it. We have some of the most experienced and knowledgeable tech people in the business. You will save a lot of time, money and agony by doing so. The exceptions are:

- ❶ Tuner Kits. We offer some competition kits that require custom tuning by QUALIFIED and EXPERIENCED tuners. We recognize that these kits are often made up of non Kenne Bell components (meters, injectors, pumps, throttle bodies etc.) that we cannot support without devoting dyno time to get it right - and we do not provide this service.
- ❷ 5.0 Mustang Kits. Kenne Bell has calibrated thousands of these vehicles, with and without superchargers. Unfortunately, the chips are now outdated and there are now far too many variations and combinations for us to support. For example: We have over 6000 calibrations for the ‘86-’94 Mustangs alone.