



## LAP 16 — KEEP IT SIMPLE

**R**ace cars are monuments to the combined ingenuities of the driver, crew chief, owner, and sponsor. If you're like me, they're all the same person and each have ample opportunity between events to make "improvements" to the Mustang. Be careful to make sure improvements will result in a better handling car that is more reliable and can produce lower lap times. We're all competitive souls and suffer from what a friend of mine calls the "tree house syndrome." This is the competitive belief we can build a bigger, better "tree house" (or race car) than the next guy. Remember, the on track result is what matters, not the perception of speed in the shop or pits. A race car at rest in the shop is just begging to be "improved" with the latest trick part as described by a buddy, mentioned in an online forum or printed in a magazine article. It's always a good idea to strive to keep your Mustang as simple as possible and resist the urge to make changes without making real improvement.

The next time you're looking at other cars in the pits, pay attention to the details. Notice what is there and more importantly what is not. We've all seen the monuments to ingenuity, cars with trick parts and the latest add-ons. That's fine if you desire recognition for your handiwork but remember the truth is told out on the track. Keeping things simple is the best way to improve your car. The easiest way to improve reliability, reduce weight and improve handling is to adopt a mind set that parts have to earn their way on your Mustang otherwise they it stay off the car. That Mustang car you admire with all the neat stuff is probably much heavier than the one next to it that's not as "advanced," and it's probably slower.

Aftermarket parts do not equal speed. Don't get me wrong, there are plenty of great components made by aftermarket suppliers but don't assume all of them are helpful. Everyone wants to go faster and it's easy to spend money on go fast parts but the reality is stock components are very good. An aftermarket ignition system with spark box, new distributor and special wires may just not be as reliable as the stock system. A good example is the venerable Ford Autolite 4100 carburetor that may have been originally supplied on your Mustang. It is a very good carburetor that is much simpler and can outperform other more popular aftermarket offerings. We once blind tested the Autolite 4100 on a small block Ford against other aftermarket offerings and found drivers could not tell a difference. Why not have that Autolite 4100 rebuilt by a professional rebuilder that supports the MCA before tossing it and replacing it with a "better" carburetor.

As you examine cockpits you'll begin to notice differences in philosophy. Some cars have minimal controls and instrumentation while others sport have every imaginable gauge and toggle switches to independently control every possible function. I have a friend that believes in the latter and uses one of the cockpit switches to turn the scoring & timing transponder on and off before and after each race. Last year, in a race where he'd been really dicing it up, he was sure he'd run a personal best lap time. Guess what? He'll never know because he forgot to turn on his transponder. In this case ask yourself, "Why does the transponder need an independent switch, why not just let the ignition power it up automati-

cally on startup?" Many cars do just this and they never lose their lap times. Keep it simple, you really don't need all those switches in the cockpit.

One of the simplest fasteners you can start to use on your racing Mustang is the pop rivet. Made of aluminum and lightweight, they can be used in many places on your car. Almost every location where wiring, brake lines, fuel lines, and inspection plates are attached to the unibody an aluminum pop rivet can be used. Replacing a sheet metal screw with a pop rivet means it will never loosen and it's just one more thing that won't need to be periodically checked for tightness. Removing a component retained by a pop rivet is easy, just drill the head off the rivet and you're done. It's just as fast as removing a screw and the added advantage of never stripping out the sheet metal from over tightening is a good thing. The next time you're removing those pesky sheet metal screws keep it simple by replacing them with aluminum pop rivets.

Weight reduction is a very good thing. Look at it this way, if you can make things simpler and simultaneously remove weight from the car without impacting reliability it's a good thing. A lot of money is spent on suspension "upgrades" that add weight without improving handling. Removing weight from the car and having a good alignment are probably more important than any single suspension upgrade. How many times have you thought about strengthening something in your suspension that really hadn't previously been a problem?

Keeping things simple applies to safety systems too. In an emergency, keeping your head and doing the right thing can make difference in the outcome. I've seen drivers leave the safety pin engaged in their fire system figuring that if it's needed in a fire they'll have the time and presence of mind to pull it before deploying the fire system. Not a simple solution, pull the safety pin in the hot grid before you get out on the track. How many race cars have the master electrical cutoff placed where it's more convenient for the driver to reach while seated than for a track worker outside the car? Imagine you're unconscious, going up in flames and the corner workers can't easily get to your cutoff switch! Make it simple for them to reach by locating it near a window and clearly marking the location.

Remember to keep things simple, it will make your Mustang more reliable, safer and faster!

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