

SJCC Tech

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Ladies and gentlemen I'm going to tell you a secret in this tech article. I know what you are thinking; you've known John Hammond is a woman all along. But, that is not what I'm going to tell you. In fact I



don't even want to tell you this because it will change the way you look at cars and if applied correctly you will be cooler than Fonzie jumping over the shark. But hey, I'm supposed to share with my car club.

Before we get started let's get a few things out of the way. The latest buzz is the Dodge Hellcat and the Dodge Hellcat is bad ass. Ok, I said it. The car looks evil and represents what American Muscle is all about. I mean hell even Ted Nugent bought one and you don't get cooler than Ted Nugent. I wonder if a gun rack will

fit in there or if he just did it because he secretly wants to see a commercial for the Hellcat where it is drifting through 2 rows of bikini clad super models holding finely made bacon products jumping up and

down with "Cat Scratch Fever" blaring in the back ground. Take a big heavy car that should haul around your kids and throw lots and lots of horsepower at it. By lots of horsepower I'm talking 707. That is a lot and that is cool. I love it. But, it's a Dodge and its big and heavy and you should be embarrassed to own one. Kinda like a moped or an ugly girl.



Super fun, but your friends are going to make fun of you. If I have offended any moped owners well, sorry. If you are an ugly person with a moped well hey I'm really sorry. I'm ugly and yeah I feel ya. But having said all that even though I'm a GM guy the Hellcat is super cool and it is going to be the buzz for a long time. Wait until the mods come out and us Chevy people are going to have a problem. A very good friend of mine works for Mr. Norm. If you don't know who that is googley it. Anyway he is working on some serious bolt-ons that will send that car into the 9s. This is all good stuff and the horsepower wars just make our lives as hotrodders more fun. I hope it continues. P.S. I have one final word for MOPAR. YENKO. That stands for Your Enormous Netherworld Kitty Outrun.



So, on to what you all have been waiting for. John Hammond is a woman. Wait, no he is a Coastguardsmen and well that is about the same thing. In the world of military badassery, the Coast Guard is about the only people the Air Force can pick on. They ride around in little boats holding drinks with tiny umbrellas. Sheesh, what a life. (Disclaimer, I only say this because I never got stranded at sea in a wicked storm and the only people who have the peanuts large enough to put their own life on the line and rescue me were good people like John). But until I do...

We are going to talk about the single most important thing when it comes to your car aesthetically. I don't care who you are or what you say. This is it. I so firmly believe in this I will gladly tattoo it on my ass right next to my picture of tony holding the Commemorative Camaro badge. The answer ladies and gentlemen is stance.

To preface, this discussion is not about performance. One could argue that the proper stance is a byproduct of a car that is set up to perform well. But, for the sake of argument I'm just going to talk



about what is pleasing to the eye. Right about now there are a bunch of old dudes (gee how many people can I offend in one article) harrumphing me and telling me I should go watch Das Auto commercial with Dr. Volkswagen, or VTEC my way down Landis Ave. But, it's true. It just is. It's my article and I'm entitled to my opinion which coincidentally is usually right.

To be clear I'm not just talking about how low a car is. There is so much more than that but stance has somehow been associated with hella flush and super camber and stupid cars. I'm not talking about that. I'm talking about the perfect alignment of factors where angels sing, Girl Scout cookies fall from your backside and men and women throw their undergarments at you. The perfect stance is difficult to achieve and depending on the car it usually comes at a significant cost. I have however watched the magic at dozens of car meets where one car is sitting next to an almost identical car and people sort of scratch their heads and wonder why one looks so much better than the other. The answer is almost always subtle changes to affect stance. You may not believe me; just trust me on this one.

The first and most obvious factor is ride height. This can be done a couple of ways. You can swap out the factory coil springs, get coil overs or air bags. Aftermarket coil springs will limit you to the ride height and spring rate Dr. Eibach chose for your particular car. You get what you get. Most of the time it's a nice compromise and the car looks better than stock, but most times they also fall short of "perfect". See the comparison I lifted from MCB's page on the right. Depending on the drop, your factory shocks may or may not be up to the task. You've effectively moved the car's operating range closer to the physical stop on the shock. Sometimes you are ok, sometimes you are beating the snot out of the shock, but it is worth mentioning for those considering an aftermarket spring. The other option is a coil



over. Its no expensiver but you get an almost unlimited amount of adjustment to set the car where you want it. Just keep in mind where you want it may not make the car's mechanical suspension all that happy. Additionally, where you want it may also come at the cost of loading up the springs to a point which may not be optimum for your set up. But, then again you can change the spring heights and rates with the coil over very easily. I've ran every suspension combination known to man on my 67 Camaro. Because of course I realize stance is everything and I could not get the car where it needed to be. It's like tuning a guitar, when a string tunes in, there is this certain resonance in the instrument that you

almost can't explain. You are plucking one string, but when it comes it to tune you can literally feel the whole guitar buzz. But, I digress. When I got the car where I wanted it, it became un-drivable. The body on a 67 makes a low car bounce off every manhole cover, squirrel and lug nut you find in the road. My car is too damn pretty for that so I had to come up with a solution and that solution was an air ride system. With air bags you can basically press a button and adjust the car height to anywhere you want. Bumpy road? Press a button. Want to impress the 16yo girls at the Honda fest? Press a button. This is the most difficult option but when you have a car that is not always happy at the ride height you prefer, it is really the only way to go. You just adjust it as you go. This does play havoc on your alignment and obviously the air pressures are changing your "spring rate", but it's the price you pay. Overall, I'm very happy but I have some new stuff on the way. Going to push the limits a little more and try a new race system that uses the air. Plus I'm a jerk and I like offending purists and airing the car out at shows and laying it down. I chuckle every time I see some old guy scoff and ask me if I drive it like that

How low should the car be? The answer is very simple. Low enough to fill the wheel wells. This



changes with rim size and maybe I should have talked about that first, but hey you get the idea. Unfortunately for those of us with 5th gens, the car was designed for absolutely huge wheels. There is a metric ton of wheel well to fill. But overall if the tires are "tucked", or up inside the fenders, you get a modern tuner kind of look which may or may not appeal to everyone. On some cars I like it but I would never say that is the holy grail of "stance". Too much gap and it looks horrible. I knew a very pretty girl once whose eyes were too far apart on her head. Not like alien far apart she didn't look like a fish or a deer, but it was far enough apart to freak you out a little bit and make you uneasy. That ladies and gentleman is the Camaro at factory ride height. Pretty girl, eyes too far apart. My rule of thumb is 2 fingers. If I can stick 2 fingers in the space between the tire and the fender it's too much. If they just don't fit, I got it right. The way the crown of the tire works sort of plays into the finger method. 2 fingers may seem like a lot, but on the car it actually looks less and is about perfect. Now that Jeff is all excited let's move on before this conversation goes the wrong way.

Now that it's all set low how do you get it to work and function well? Hell I don't know what do I look like a tech guy? The real answer is that depends on the car and what the driver wants from it. But, remember we are focusing on looks here today.

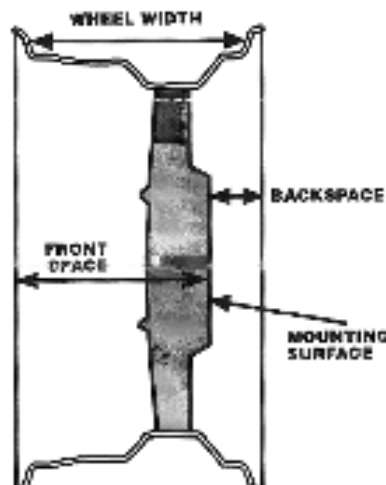
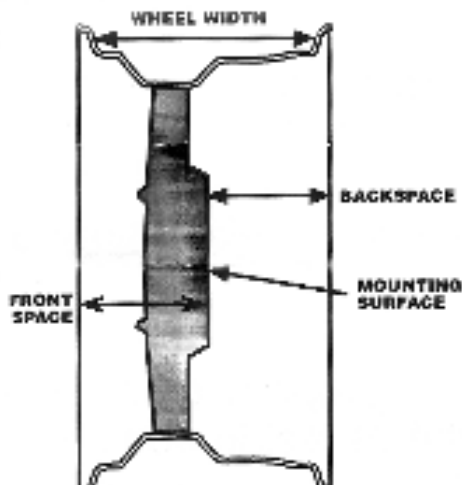
The next area is the wheel. Just slap on the tallest thing you can find and be done right? This makes me want to slap people. This takes so much thought and planning you could write an entire article on why one wheel looks better than another. If you think you can just go to house of chrome and tell them you have a Camaro and send ya the best thing they got you are wrong and unfortunately not alone in the world. Oh man this gets me fired up and I do apologize, but I hate to see people spending good money on wheels that are just wrong for the car or worse looking than stock just to be different. Go buy a unicorn hat. Whew, deep breath, ok. Wheels are a huge part of stance. Huge. Most times the factory (size) is pretty close, but not dead on. The biggest offender in the universe is Ford. Forget wheel style for a moment. Just focus on size and offset/backspace. If you don't understand offset we will get to that in a bit. But, think back to almost every last generation Mustang you have ever seen. Ever think to

yourself, “those wheels look goofy”? If you did it is because they are! The wheels look like they belong on some other car. They are not specifically cut for that body. They are sucked in too far from the fender lip and are way too damn skinny. They take a decent looking muscle car and stick on it wheels that belong on a Taurus. Reminds me of that guy at the gym that forgets leg day. But boom, there ya go everything you need to know about wheels in 2 very poor sentences. Not Skinny. Not sucked in from the fender lip. Easy. Done. How you do this is a dance with math and numbers and a sacrifice to some Aztec god and probably a bank robbery because wheels that are cut right for your particular car aint cheap and that ladies and gentlemen is why so darn few people get this right, it’s expensive and it’s hard.



First off, take wheel width. On the street and again for looks a good rule of thumb is to stick the widest thing you can fit in there. Ford may have got a discount on 235/50/18s but that does not mean they belong on the car. The fact that a performance car is even offered with a 235 tire baffles me, but in 2013 some GTs with standard brakes had that size. When attempting to go larger than stock on wheel width, you are probably going to be limited by the physical aspects of the car (fender/wheel well) and the suspension. But even with no modifications, there is always a bit of width to be squeaked out from the factory. Luckily on the modern Camaro, we can fit a pretty decent size tire under the car. Go back to 1967 and you don’t have much to play with. I would throw an Ed comment in here but I’m already on thin ice. Those of us who lack the brains to know it’s not good to cut up a perfectly good car realize that with enough money and a welder, you can give yourself all the room you want. But I can assure you if I listed the mods done just to the front of my 67 you would probably throw something at me, and then go tell my wife and 9 times out of 10 nobody has any damn clue how much effort has gone in there so you ask yourself, “self, was that really worth it?” But I always answer yes and it’s why I’m broke and why no one has ever accused me of being smart.

Once you figure out how wide you can go with the wheel, you need to sit it in the wheel well perfectly. See if you have 11” of space that does not mean any 11” wheel will fit in there. The mount pad of the



wheel has to be positioned relative to the front and rear edge of the wheel so that the when the wheel is bolted to the car it sits in the space exactly as it needs to for the particular car.

Wow, that sounds confusing. This is done by the backspacing and or the offset on the wheel. I'm not going to get into a lot on this; much has been written and covered online. Let us just say that once you find the max width wheel you can fit, you need to center it in the hole so that it still fits keeping in mind of course that a tire is going to be mounted on it.

If you are not dealing with a new max width wheel you want the wheel (and mounted tire) as close to the fender lip as possible without rubbing. This can really only be done by running a custom spacer to push the wheel out. Spacers are one of those taboos that every internet junkie will tell you kill more people than hurricanes and Mardi Gras love triangles combined. I have never had one fail. Then again I don't run the 24 hrs of Le Mans either. I will say this, if you are going to run them spend money. Cheap spacers are like cheap helmets.

I won't say much for the style of wheel because everyone has a different preference but I will say be careful, this can make or break you. I've seen a bunch of dumb ass wheels people paid a lot of money for. Wheels say a lot about the driver; don't let them say you are an idiot. On 5th gens in particular I have found it was very hard to top the stock SS wheel. Many looked off, gangster or just plain stupid.



Wheel diameter must be mentioned but I'm not going to dwell on it. The car can play a huge factor in what diameter to run. Normally I would rather watch girl movies with my wife than run a 20" wheel, but cars today are designed for big wheels and almost look dumb without them. Put a 20 on a 4th gen and well you aren't my friend any more, but they look right at home on a 5th. Again, it's tough and has to be just right for the car. Personally 21" is pushing it on a 5th, but if it sits right it still looks good.

Tires and tire size have to be correct. The sidewall is specifically important. Too much and you might as well be in 1976, too little and your car should have a Honda on it, and God-forbid the front sidewall be taller than the rear. Please. Lots of tire calculators out there, I like the one on miata.net.

The last trick I want to mention is probably not something you would think of when it comes to stance and that is the body. There are subtle mods you can do to increase the visual appeal of your car yet not look like the fast and furious. One example that leaves much to be desired is the noses of cars today. They got all goofy looking due to impact laws and crap like that. Plus, most people don't want a car they have to drive carefully over speed bumps and the like. You can add a very small lip or a side skirt that makes a very big difference. The 4th gen

Camaro suffers greatly in this regard. It looks unfinished and weird in the front. Add a small spoiler and it gets tremendously better looking. You can of course go overboard and look like a fool so be careful. This must be done with great caution. On my old corvette I searched high and low to find something that looked right, and when I did I had it painted



and when installed you almost didn't know it was any different from a stock car. However I had several people ask me why the car looked different in the front and why it "sat" so much better than others. The 5th gen has lots of very nice offerings for the nose.



So, that is the secret. Stance has the greatest visual impact on a car period. You may not be in complete agreement with the way it looks, but it always catches your eye and attracts attention. You can't help but notice a properly stanced car, you just can't. It's like fake boobs, ya may not believe in them, but by golly ya sure notice them in a crowd. I firmly believe every car should be stanced to the max your pocketbook or conscious will allow. On the conscious note, no, I would not mess up a 67 Z28, but my hooty I sure would. I certainly understand there are some cars that should not be messed with. But the majority of cars can and will benefit from some stance love and more importantly, like eating bacon and growing epic man-beards, as Americans it must be done. Love it or hate it, I bet you will look at cars that stand out and see they are using some of the things we talked about today.

Happy Camaroring! Spring is coming!

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