## **Y-BLOCK SHOOTOUT TIPS PART 4: SHARPENING YOUR SKILLS**

by

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The previous installment covered the basics of making passes down the local 1320 for those Y-Block enthusiasts who might want to do more at the dragstrip than show off their rides. It centered about the finding out just how consistent your car is – because if it is consistent, at whatever elapsed time and mph it goes, you are ready to practice and learn the remaining skills of Bracket Racing and put them to good work. Namely, how to determine your dial-in, how to react to the starting line "Christmas tree", and how to take the finish line. But before I go there, I'm going to assume that there will be some cars (and drivers) that are either not consistent, or uncomfortable with their performance, and would rather have a better et and more speed before they settle down to racing. It's a double-edged sword. As long as you are making changes, its also going to make it difficult to be able to select a dial-in that you can win with. So we'll try and settle the "need for speed" (and consistency) with a few "free horsepower" tips that may help you over this hurdle.

If you run an air filter, you might try a couple of passes with it off. I've watched Harry Hutten put one on to slow him down .15. However, the results are usually most effective if you have a means of mounting the base of a custom air cleaner on top of the carburetor to help turn the air into the throat of the carburetor. If you have insulation or a liner on the underside of your hood, I wouldn't recommend it. I personally will not run without an air filter (I use a K&N performance filter). A 312 cubic inch vacuum cleaner has a lot of suck at rpm. Although Harry runs without one, he had a few comments about the (dirt) scores he saw on his cylinder walls when he had the heads off last fall. You might also think about removing your mufflers. I picked up .50 seconds when I took my glass packs off. A word of caution here – I prepared mine at home before I went to the track. I made sure my header pipes were round and clean (removed the rust), and used plenty of anti-seize. And don't get too tight with the clamps. If you have to use much muscle under the car getting them off, you stand a chance of breaking some flange welds on old pipes. Been there, done that. Best bet is competition Flowmaster mufflers (approximately \$75 each) for optimum torque and horsepower (and sound) – call in your application for the right ones.

Play with your timing. You can increase your initial and final timing and make your Y-Block come alive, especially if you have some performance parts (cam, headers, etc.). I picked up over .2 and 2 mph with 15-degrees initial / 36-degrees total, and didn't stop there. Another word of caution - sneak up on your marks - you're playing with detonation here, and you don't want to go there. And you can borrow a friend's aluminum wheels. Less weight = more speed. The general rule is .1 of a second for every 100# static, or 10# dynamic (goes both ways). So decreasing the weight of your rear driving wheels by 10# has as much effect as taking 100# off the car. And while you are borrowing wheels, you might also try a set with mounted slicks, especially if you have been turning your street tires off the line. Tire spin costs you time, and properly inflated slicks won't spin. Another word of caution. When tires don't spin because they "hook up", the next weakest link might just happen. Don't get carries away. If you are running a good set of steel-belted radials, you should find the optimum inflation pressure before you come to the track – less is not always better. Find a clean stretch of concrete and nail it from a dead stop. You want a full-width rubber track. If you leave two lines at the outer edges (bare middle), you need more air. If you leave one line in the middle, let some out. When you get it right, enter it in your logbook and check it at the track in the lanes. While we're talking tires, you can approximate a lower gear change by putting on a shorter set of tires. 26inches in diameter is a bout as small as they come. Borrow a set of 26" slicks on aluminum wheels and see what they do for you. If they help your "need for speed", put them on your Christmas list. Aside from carburetor jetting changes, that's all the "free horsepower" tips from my experience. In the next issue we'll have more tips from other (faster) Y-Blockers, and they will most probably have a cost factor involved - for your Christmas, Birthday, Anniversary, or whatever lists.

Now I'm going to assume that you are finally comfortable with the times your car is turning – which basically 95% of **determining your dial-in**. Look at your time slips / logbook. Say, for example, that on race day, you have two time trials (the more cars, the fewer time trials). I've been to races where you only had one – last year's SHOOTOUT for example, where there was too much oil-down time from the fast cars. If you had a 16.95 and a 17.05, don't just jump at a 17.00. What order were the times. Was the car picking up or slowing down? Were the runs in the same lane or one from each lane? How much time between the last run and this one coming up? As a general rule, the day warms up, the humidity drops, and a lower horsepower car tends to slow down a tad – due to the temperature increase. I bring a home Temperature, Humidity, and Barometer gauge cluster to the track and monitor the readings to see if there are any abrupt changes. Unless a cold front comes through and the Barometer changes abruptly, you can just key on your last previous run. If your last run was the 17.05 and the day is getting warmer, you have a couple of options. 1). Write a 17.05 on your windows, assume the car will slow down a couple of hundredths, and run it all the way out (don't lift at the finish). Remember that if you cross the finish line first and you don't run under your dial-in, you win. 2). Or, knowing your car will slow down with the increased temperature (your logbook shows you this), you write a 17.07 on your windows and know that you might have to lift at the finish line. I

prefer the first way – to run it all the way out and not fear breaking out of my dial-in. More about this in "taking the finish line". Each time you race and win or lose (and keep records), you understand your car better, and selecting your dial-in becomes easier.

How to take the Finish Line is the easiest thing to understand, but hard to learn. Basically, you have to take the finish line. You have to assume that both of you can run your own numbers – so you have to be the first one to cross the line. You can't let your opponent take the line and beat you – but there is a reality check here. Bracket Racing is based on everyone having the same chance at winning, and no matter how well you think you know how to determine your dial-in, there's always the chance you can break out and lose. Personally, I'd rather break out than give my opponent the line and let him beat me, but that's my choice. The worst thing you can do is think you have your opponent covered and lift your foot off the accelerator just before the finish line – then watch him take the line and get the win light. And when you get your time slip, then you find out that you cut a better light on the start and the only way he could have beat you was to break out himself. Congratulations, you just lost twice – he beat you and you let him. In the words of a few great Bracket Racers, the slower car is always ahead until it is passed. A tip I learned the hard way is to never take your right foot off the floor. Put your left foot on the brake, and if you think you have your opponent covered and you might be breaking out, ease down on the brake to shave some speed. If you lift your right foot off the accelerator, you lose the momentum of the car, and you won't be able to get it back in time. This is something you have to learn to understand. A word of caution – nailing the brakes too hard at the finish line might cause handling problems, and you can be disqualified for not controlling your car. Choosing your dial-in correctly and beating your opponent on the tree will eliminate the need to smoke the tires at the finish line and get attention you don't want.

**Reaction time.** I saved the hardest for last, because there's a lot to learn on the starting line – and it affects everything else. Basically, 90% of the races are won on the starting line. If you cut a better light than your opponent on the start and can run your number (or close to it), taking the finish line just got easier. But cutting a good reaction time takes understanding and practice. If you leave on the last yellow, and your lights are .550 or better, you will get your share of round wins. Find the red light and then understand what it takes not to cut one during eliminations - there's no race with a red light - the unlucky one goes home and the other gets a "time trial". But if you are cutting .600 lights, you have to adjust the car. And the options are many. You have to make it move quicker. Less weight helps, and more timing does also, but they also affect your et – which is not a problem in Bracket Racing. If you already have all the extra weight out of the car and the timing is maxed out for performance, you still have a few options. You can put more air in your front tires to help them roll out. You might even try smaller front tires. If you've done all this and its still not enough, there are still more options. You can "bump in" deeper in the stage light - but you have to be consistent. I watched Harry bump in three times (slightly release the brake with the converter rpm up) and still leave both stage beams lit. That got him his .550's, but it wasn't enough to get past the sharpshooters in the final rounds. Sooooooo, he started "Deep Staging", where you bump into the second staging bulb until the first one turns back off. This way, you have rolled forward probably another 5-inches from a normal stage, and have cut that much off your rollout distance. There is a requirement here, however. You have to shoe polish the word "DEEP" on the side windows so the starter can see it – and he will allow you the time to move the extra distance to turn the first stage bulb back off. This gave Harry the ability to cut consistent .520's, with an occasional .50X. Easier said than done. I tried it and hated it – but I drive a 4-speed without a line loc and it was just too much for me to get used to. But you might have to. A word of caution. It takes time to master this. A good opponent will spot the "DEEP" on your window and try and beat you staging. He knows that when you finally blink the first stage bulb off that the starter will then hit the switch. The 2.5 second "auto-start" time (last issue) is no longer. It will probably be more like one second – and you have to be ready. Good luck! But if Harry can learn it in one weekend, so can you. No matter what your staging routine consists of, practice, practice. Those same great Bracket Racers say that you have to consistently stage the same within a quarter of an inch if you want to consistently cut a good light on the start and consistently run your number.

Now you have the basic information and tips for Bracket Racing – and you have to use them to suit yourself and your Y-Block ride. After you have used the Test & Tune sessions to build your confidence, I would recommend to use your skills at Nostalgia, Muscle Car, Hot Rod, or Classic Car Drag dates where they show, swap and drag. That way, most of the racers on hand will be like yourself, with limited track experience – maybe even less. Remember to keep good records, use every bit of information from your time slip, and above all, have fun. Have your homework done for Tech inspection. Get a rulebook and be prepared. The faster you run, the more critical they will be. 13.99 and quicker cars need a helmet, and some need a driveshaft loop, especially stick cars running slicks. And you must have a radiator overflow "catch can" to keep these fluids off the track. You can be disqualified for dripping fluids on the starting line. If you are like me, with after-market gauges, don't have an oil gauge inside the drivers compartment with plastic lines. 25+ year old plastic lines can make a mess out of the interior in a heartbeat! Go braided stainless. Ditto for your fuel lines. You are only allowed about 10" total rubber fuel lines inside the engine compartment. And do everyone a favor by writing "312 Y-Block" describing the engine size on the Tech card. Chances are the announcer will read the information on the card during eliminations. Harry found this out during competition at the NSCA races.

When you have a few races under your belt, think Labor Day weekend, and plan on coming up to the Ford EXPO Meet at

National Trails Raceway in Columbus, Ohio for the Y-BLOCK NATIONALS & SHOOTOUT, and meet the rest of the Y-Block bunch. Plan on it! The activities/prizes are in Y-Block Magazine and on the Y-Blocks Forever Website.

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