

Thoughts on 944 Spec Rules

Posted by loftygoals - 10 Nov 2012 23:56

Let me first say that I am not currently a 944 Spec owner. I do think it is the finest spec racing class, around. I sold my car earlier this year because my focus shifted from driver development, which 944 Spec is great for, to car development which has no place in the series.

I do continue to support a lot of the 944 Spec racers in the Texas region and want to see the series continue to grow and prosper. When my focus shifts again, I fully expect that I will return to 944 Spec.

One thing I feel this series does really well is controlling the costs of racing. The cars are cheap and the consumables low. It's crazy, but I can build a nationally competitive 944 Spec car cheaper than I can a nationally competitive ChumpCar!

So here are my thoughts. I'm posting them here instead of the new rules thread, because I'm not suggesting rules changes, just my thoughts and opinions.

1. The HP Cap

I had to think about this a bit. I have and could all day build spec motors that are class legal that would make well over 140hp. But, what's the point? I'd rather see this class stick to what it is good at--fun, cheap, racing on a level playing field.

Anyone can throw together a motor that makes 138ish. A fresh head gasket, a compression ratio that is close to the limit, and decent AFRs are all it takes. If someone gets lucky, a motor assembled like this will make 140--which is still legal from my reading of the new rule (138 +2).

Keeping the class from becoming one where you have to have a pro motor to win is important. I know it isn't there yet, but it very well could have become that way if changes weren't made now.

Policing this is what sucks. Eric has done a great job with coming up with a methodology that is sound and repeatable. Is it perfect--nope. Could it be perfect--nope. Will it stop cheaters from cheating--nope. But it does make a strong statement about what this class is about--YES. Great job, Eric!

2. Tires

I'm happy the RR won't need to be shaved. I'm also happy with Toyo's support of the class.

What I don't like is having separate completely different rain tire. Despite my hatred of the RA1, it was great in this regard. I only needed 4 race tires and 4 rains. If I killed or flat spotted a dry tire I could run a rain. When my rains were getting old, I could shave them and have dries. I hated shaving, but at least it made sense.

Now what would I do? Take take 6 rains and 6 dries? I don't know.

Honestly, from a low cost perspective the best tire for the class is the R888. I know everyone hated them, but they don't need to be shaved, are still low cost, and would keep it to one tire for the class. I'm also convinced that the problem with the R888 was the size, not the tire.

Which brings me to my biggest point of frustration--the 255/50-15 tire size. Why can't we be like the other spec classes and run the 205/50-15? If we all used the same tire in the same size it would lower costs. It would also make it easier to find tires in a pinch. Most of the tire warehouses stock 205/50-15, but very few have 225/50-15. If I needed a tire at the track, I could also get one from a SM or SE30 if none of the 944 guys had an extra.

Additionally, a 205 is a better size for our rims. A 225 on a 7" wheel is pinched. These cars feel better with a 205 on them. I think if we would have run the R888 in a 205, we would have been much happier with them.

No matter what tire is run, a 205 is the most cost effective size. The R888 is the most cost effective tire.

3. Suspension

I could write a book on early vs. late offset, but that's not where I'm going to go. My biggest gripe about these cars is the shock/spring package.

Torsion bars suck! I've never heard anyone say, "I love the torsion bars on my 944." When I talk to new guys wanting to build cars, they are scared of them. They are a PITA to index. I don't even like doing it when I get paid to do it. My business partner at the shop wants to stop working on 944 so we don't have to do torsion bars any more. I had a customer tow his car over 3 hours to me because I was the closest shop that would do it. The guy that bought my 944 spec car wanted to change the ride height. The shop he took it to is known for setting up race cars. They battled the torsion bars, even after

I gave the shop advice and pointed them to the articles on this website.

Also why are we running street shocks? Koni Sports are fine shocks--for the street. They don't belong on a race car. Bilsteins are great too, but they need to be revalved to be a good race shock.

Why not run a rear suspension package that includes a coilover rear shock and real adjustability? Then torsion bars could be eliminated and we could have a better suspension package overall. This becomes even more true when you look at the cost of the Spec suspension. For the same money you could have true coilover kit made.

Speaking of money, it's not cheap to have the torsion bars replace and/or reindexed. I guess the price is right if you do the work yourself, but not everyone has the room, time, and/or talent to do it themselves. It adds a lot of costs to the build if you have to have someone else do it. Removing the torsion bars and replacing the rear shocks with coilovers is much easier.

Of course the problem with a suspension change is the investment that current racers have in the kit. I don't have a good answer for this, but I do think that better suspension would make the cars more attractive to potential new racers and more fun to drive.

-bj

=====

Re: Thoughts on 944 Spec Rules

Posted by joepaluch - 12 Nov 2012 09:32

joeblow wrote:

Torsion bars are NOT conducive to promoting this class. If nobody was going to change them then maybe but the fact is you need to spend big money for torsion bars and then the insane amount of time to get at them. Coil overs are cheap and spring sets can be had for 1/3 the price of torsion bars or less. When this class started this was why I stayed away way back when.

When this class started 10 years ago Torsion bars were the most cost effective solution. They are still pretty effective right now. I set my t-bars in 2003 and have never needed to change them since. They are set and forget and not a big job. Just remember to remove them is still 6 of that 8 hours as you can't leave the stock ones in and add coil overs. The rear will be way too high. As for corner balance that done with spring plate adjustment and is not hard.

There is no reason to change the rules now for stuff like this. Ok and why Koni's? Again cheap shocks that work. They work without spring rates and are cost effective. They were 10 years ago and still are now.

And do you know what the biggest reason we keep t-bars? Effective spring rates. On t-bars they are limited by the size and that keeps us in the 400/30 range. That low spring rate ALLOWS us to use the cheaper Koni shocks. So it all works together to create a suspension package that provided 90% of the race car feel at 50% of the cost some fancy 1000lbs-in spring rate car with fancy racing shocks. These softer spring rates also put less stress in the chassis which reduces wear and tear.

The rules were created to take a stock 944 and make it faster by stripping out all the things you don't need in a race car. Then add in stuff that makes the cars fun to drive and race, but not overly expensive. The intent was never to make the fastest 944 we could. The intent was to make fun, reliable race car as cheaply as possible.

=====

Re: Thoughts on 944 Spec Rules

Posted by RacerX - 12 Nov 2012 22:49

bj wrote:

While I agree that installing torsion bars isn't rocket science, the indexing process is a lot more difficult and time consuming than a coil spring on an adjustable collar.

Book time for replacing the torsion bars is 7.8 hours. My shop charges less than any other Euro specialty shop in Dallas per hour-\$85/hr. That's \$663 just to get the bloody torsion bars installed. If you are going to one of the specialty Porsche shops, you'd pay \$115 an hour or \$900 for the job.

Now, for \$900 I'd do nothing but install torsion bars all day! That's a lot of money to replace some springs.

So besides the complexity of making ride height adjustments, what if I want a different rate? There's another stack of cash or 8 hours of your life gone, not to mention the expensive price of the bars themselves.

tcomeau wrote:

If we went to springs in the rear, I'd need at least several sets of springs for different tracks.

Remember, simple, cheap, equal.

To be fair, you could do this within the rules today. For example, you could run a 400#/30mm setup for smooth tracks and a 350#/28mm setup for rough tracks. No body does, because it would be a PITA

-bj

Using the TB set up saves everyone money. Nobody changes them out like was said because they are a PIA to do. Being a PIA to change, 99.9% leave them alone once they are done.

If we were to switch to a coilover system someone would start changeing coil springs out at every track, then everybody would have to. I don't have the time or money to buy 4 or 5 sets of springs to change out at different tracks and this saves time and money in the long run.

=====