Open Letter to the 944 Spec Community

Posted by Atteberry - 17 Nov 2010 21:16

AN OPEN LETTER TO ALL MEMBERS OF THE 944 SPEC COMMUNITY

By: Thomas Atteberry #805

Imbedded in some of the proposed rules changes is a view that some competitors may have purchased very expensive professional rebuilt motors that cost in the $10,000 range and that this defeats the purpose of the class as being a low budget racing class. At the last Southern California event someone mentioned to me that I might be the example of the expensive motor. While I did replace may motor and yes I paid someone to rebuild the motor and bring it to the best spec available I did not spend $10,000. I did spend substantially less than that amount and yes John Millege Engineering professional, in Los Osos California rebuilt the motor. I do not have the expertise, shop, time and tools to do that work myself, just ask the Southern California race group. So why the new motor? In the summer of 2009 the motor in my car overheated after I ran over a cone and the radiator fan cut the lower radiator hose. After a leak down test a 118 Horse Power Dyno check at 7's Only racing in Buttonwillow California and an inspection of the block and pistons which showed scoring I was faced with a decision run a low horsepower motor, try to re-bore the block or buy another motor. I decided to try and buy another motor because finding someone to re-bore the old block would be difficult and the result probably would still result in a lower horsepower motor. The Southern California race group helps each other out with advise, parts and in this case engines. Charlie Buzzetti called me with a potential replacement motor. In what has to be just pure luck it was a crate motor that Porsche donated to a college for a class to have a motor, which they could take apart, inspect and reassemble. It had been sitting in someone backyard shed for over 10 years and upon his or her death the heirs put it up for sale. While a brand new motor it needed to be taken apart inspected and all seals, gaskets and the water pump needed to be replaced then reassembled. The new parts were not the cost but the labor involved to disassemble, inspect and reassemble took many hours. It also was delivered to the car, which was 124 miles away. The motor is a 1982 low compression engine. Of note Charlie Buzzetti could have taken the motor for himself but instead called me and arranged for the sale and delivery to Millege. In fact Charlie inspected the motor first before offering it to me. The end result is a new motor that generates 138-horse power. This motor is built to the rules and specifications currently in place.

That is the story on the motor now what about myself. Three years ago I stepped into a racecar to the first time in my life at age 54. That car was a Fun Cup endurance racecar with 150-horse power that weights 1600 pounds. My first race was a 6-hour endurance race in June 2008 with two other drivers. The owner of the car closed his business at the end of 2008 and sold the car. I talked with him and Ryan at NASA about what class may best suitable for a pure rookie that would also fit my personality and they both suggested the 944 Spec. For 2009 I rented a car from Tim Comeau in San Diego. At the end of the 2009 season I purchased that car from Tim. 2010 represents the first year I have ever owned and raced a car by myself, trust me is shows.

From a cost and car preparation perspective the Porsche 944 fits very well given its spec class rules, which limit modifications and are designed for fairly even car characteristics. The other element is the type of drivers. In the case of Southern California and to my knowledge of the Arizona, Rocky Mountain

and Northern California the drivers are all true gentleman drivers who are more than willing to share information, time, tools and parts to get everyone on track having an enjoyable weekend.

My approach to racing falls into two categories; maximize the car to the rules in place and try to maximize driver track item to improve my skills.

The car maximization according to the rules can only be accomplished if the rules stay constant. Constantly shifting rules make accomplishing this objective difficult. So how did I go about maximizing the car? First, get an engine that can generate competitive horsepower (130-140). Next was to get the weight down via elimination of the dashboard (that is weight up high in car), all excess wiring (could be 50 pounds with fuse box), remove extra body weight. At nationals I saw cars with rubber bumper guards (maybe 20 pounds). I saw full tail pipes and mufflers; this has significant weight and robs a little horsepower. The rules say 2600 pounds with driver the closer to that number the better. In fact if one gets under then add back ballast. Anyone can do this they just need to set a schedule to accomplish goals. I do suggest a wiring expert to eliminate the extra wiring, as a few items are critical. I also suggest eliminating the dash and installing the needed gauges (it is not expensive). For any of these items just call and I will give anyone the details. The rules are fairly simple in regards to what one can do.

Getting the car to its maximum potential is easy compared to getting the driver to his maximum potential. There is no shortcut to time behind the wheel. I found that Friday afternoon test day before the weekend very helpful. Running in HPDE3 helps as does super sizing to GTS class as well. Does it work yes but it is a long road. If 8 cars run in Southern California I will have a great weekend if I finish 6th and would be ecstatic if finished 5th. I offer two confidence-building suggestions. First have a front running driver swap cars with you for a test session. If they can drive your car faster then you then you know the speed has to come fro you. The second is to find a way to race in a pack and get use to traffic passing and being passed. I will add a third endurance racing is a cheap form of track time. By maximizing my car and trying to maximize track time in the past year it has produced results. At the end of 2009 I would be lapped by the leader during the race and rarely passed anyone. At the start of 2010 this was still the case. However by year end I was no longer being lapped, I would pass people and as a measurable result at each track my lap times are down by about 4 seconds.

Using these two approaches to reviewing potential rules changes and not one suggestion fits into either objective. In fact the suggestions either add cost or complicate each objective. Instead of taking time to replace windows with lexan why not spend that time finding ways to reducing weight. If I want to share information with someone that should be my choice and not a mandate. Limiting horsepower just means that more time and money will be spent staying in compliance. It may also turn off others who wish to join the class given a set of more complex rules. Simple rules should help attract others to the class and hopefully more drivers to race with and refine passing and defense skills, all of which builds confidence. Limiting head thickness and compression appears silly to me and just makes rules more complex. The current rules allow for 10.5 to 1 so if someone wants to go there fine let them do it. Last time I looked the only way to get there is to use a stock head. In the end going from 138 HP to 142 HP probably does not buy you a victory. However several more years of experience and more hours concentrating on better driving will get you to the front. I doubt if I add 4 HP to my car I am going from 5-6th to 1st -2nd. Those

guys are still 3-4 seconds faster than me. My better course of action is to ask for the leaders help and advise.

This is a letter about how I have approached improving my skills and grid position. It also references the high quality of people in the class. My view is for those two factors to continue and improve it is best if the rules are left alone.

Thomas Atteberry

#805 Southern California

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Re: Open Letter to the 944 Spec Community

Posted by Atteberry - 21 Nov 2010 14:54

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First off it did not sound like a commercial but a good summary of how to attach the problem of rebuilding an engine to performance in the high range of horspower and torque as well as last.

I feel fortunate to have found a crate motor as I am expecting through proper care to have a reliable engine with proper power for an extended period of time.

One question, your comment regarding a forged versus cast cam which in the end has the better strength and reliability?

One comment. Through testing for best HP I found that retaining the stock air box made the best outcome do to the engineering in the floor of the box which must assist in air induction. I did discover that moving the air intake from the wheel well to in front of the wheel well utilizing a cone filter was optimum. I think it is due to slightly cooler air and more of a ram induction of the air once outside the wheel well. It does result in a need for constant cleaning. I will check but I think we experimented with ram induction through the turn light hole and did not see a better outcome.

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Re: Open Letter to the 944 Spec Community

Posted by Salanis42 - 21 Nov 2010 15:45

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You mention removing rubber bumpers. I'm new to the series and have been thinking that the front bumper is insanely heavy. Sounds like I'm allowed to just unbolt the two big rubber blocks off the front.

Is that correct?

Any other good suggestions for easily shedding weight? You mentioned the dash as well.

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Re: Open Letter to the 944 Spec Community

Posted by spec28 - 21 Nov 2010 16:01

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bumper pads both front and rear, heater components, all the un-needed wiring you can remove, complete dash gone, fuse and relay panels, e-brake, etc....

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Re: Open Letter to the 944 Spec Community

Posted by Atteberry - 21 Nov 2010 16:17

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It is easy to remove the front rubber bumper guards it is just 4 bolts. Yes they are heavy mabe 10 LBS a piece others could confirm that, however it is weight infront of wheels so it is in a bad location. Also remove the rear ones. These are a little trickier as they hold in the side plastic bumper pieces. So once removed you will need to put a large washer over the bolt so that it is larger than the plastic corner piece hole. Again this can be done by any novice mechanic. (heck I did it)

Removing the dash is very helpful to reduce weight and its location as it is up high. I spent about $600 for six analog instruments. You can spend about $1000 to $1200 for an electronic dash but why. I also moved the guages to a better location at eye level just to right of steering wheel in what would be above the transaxle tunnel. The six guages were as follows

Oil Pressure ATM 4321

Fuel Pressure ATM 4311

Oil Temp ATM 070-4341

Water Temp ATM 070-4331

Tach ATM 4497

The $600 included aluminum bracket to hold instraments.

I also installed a shift light on cage brace at eye level.

See attached pictures.

Other weight would be remove the passenger seat, take out the door bars, take out the door latch components and replace with simple strap, take out power steering, AC, heater if you can take out all unneeded wiring this could be 50 LBS that includes fuse box. Here you may need an expert as the wrong wire removed and the car will not start. Remove front lights and all the assembly. Use a tow strap on front with a tow hook in back. Take out the key start and replace with button.

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Re: Open Letter to the 944 Spec Community

Posted by Atteberry - 21 Nov 2010 17:39

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get smallest battery that will start the car again weight up high which needs to go.

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