

## Milwaukee 944 Spec Car build

Posted by Omn3d0n - 07 Mar 2009 11:22

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Hi,

I thought I would share what I'm up to in Milwaukee. I decided to go ahead and build. I ended up having a local race shop which I had been using to take care of 933 for regular and DE maintenance over the last 8 years build the car They are Chris Schuh Motorsports. They have been involved in PCA racing for along time. You can find them if curious on the web at [csmotorsports.net](http://csmotorsports.net). I see if they can put the 944 build on the web. Here are the highlights.....

We found a well maintained 1983 that ran and shifted well. I wanted the lighter car since I am planning it street legal with headlights, windshield wipers, defroster, windows and all turn signals.

The engine is being completely rebuilt with all the spec upgrades, cross drilled crank, external oil cooler, new radiator, ac delete, shaved head and accusump. I want reliable engine for a couple of seasons.

The transmission is fine, just a clean and flush. It is not LSD, but given the feed back, it not that big of an issue.

The suspension bushings are being replace with delrin (they are quite experience with what need to be done to make them work well). Camber plates plus Koni's all around with coilovers in the front. Sway bars in the front and rear. Lastly a strut brace.

The brakes calipers plus the master cylinder are being rebuilt. Stainless steel brake-lines, cooling ducts, speed bleeders, new rotors and pads.

The interior is stripped and painted white. The dash is aluminum using oem gauges plus longacre push button starter, oil temp, water temp, oil pressure plus warning lights. The doors are gutted and have aluminum door panels. Kept the glass with straps. Still debating the shift light.

The cage is a firehawk 944 cromoly cage welded in. A 3 zone fire suppression system with a electrical cut-off switch.

The exterior is being painted. I am debating on the color. Right now the front runner is turquoise blue with white graphics. The wheel are cookie cutter painted white.

I'll post pictures as soon at it pretty.

Thanks for the all help in getting going in this adventure.

Sid

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**Re:Milwaukee 944 Spec Car build**

Posted by Sterling Doc - 07 Mar 2009 14:19

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Wow, Sid, sounds like a nice build! How far along are you now?

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**Re:Milwaukee 944 Spec Car build**

Posted by SvoChuck - 07 Mar 2009 16:15

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Sounds GREAT ! I would recomend you do not "shave" the head unless you need it . We do not allow off set woodruf keys so you will lose torque to the head shaving ...

Welcome

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**Re:Milwaukee 944 Spec Car build**

Posted by Omn3d0n - 08 Mar 2009 08:19

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I thought that shaving the head leads to matching the compression ratio available of later cars? I am confused (not the first time) on how it lower torque.

The car is apart at this point. The roll-cage is ready and will go in this week. All the parts for the suspension arrive this week. The car will be ready by the end of the month. I should be testing by the first week of april.

Sid

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## Re:Milwaukee 944 Spec Car build

Posted by SvoChuck - 08 Mar 2009 17:17

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when you shave the head you move the cam closer to the crank. that changes the timing of the engine .  
My understanding is it retards the timing hurting the lower rpm engine performance. (lower torque) it  
does help the top end but our cars can't use this due to other factors . no chip to raise rpm limit, no extra  
air stock intake ,etc etc.

so yes it raises compression but the timing makes it not a good trade .

I have no hard fast numbers on this .

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## Re:Milwaukee 944 Spec Car build

Posted by Sterling Doc - 08 Mar 2009 22:45

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There are dimples in the head surface that are factory marks for acceptable levels of head shaving.  
Staying within that limit should not cause significant timing issues, but aggressive shaving can, at least in  
theory. We need to get some better data on this from a few &quot;dyno days&quot;

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