Piston Skirt Wear

Posted by michaelreich - 09 Nov 2012 18:35

Quick question to you engine builders out there:

Measured bore and piston skirt diameter. The pistons/block are tolerance 1.

The bores are in spec and look really good. The piston skirts are 99.949 +/- less than .002mm across all pistons. The skirts are a bit shiny, but they do not look bad. Would you run them?

It looks like I am off about 0.034mm (against wear limit). I guess the taboo question is if I can get them coated (skirts only) to get them into spec if you do not think they will work.

Would appreciate any advice.

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Re: Piston Skirt Wear

Posted by Nosferatu - 14 Nov 2012 09:05

If you've the pistons coated you will need to adjust the bore of the cylinders by lapping. Both the coating and the lapping process can be done but the issue is usually to find somebody able to do this locally.

I just finish my engine build and went with a set of used european pistons and rings on the original bore. Everything was within limit but not close to new.

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Re: Piston Skirt Wear

Posted by Sterling Doc - 14 Nov 2012 10:30

Michael. Sorry I didn't get back to you sooner - been swamped! The answer is that coatings are not legal. Low compression pistons are very plentiful - I have close to 30 sitting around. If you can't find any locally, let me know, and I'll work on picking out some good ones to send out.

Nosferatu - I hope that your motor is not a 944 Spec build, as the euro pistons are not legal for us.

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Re: Piston Skirt Wear

Posted by Nosferatu - 14 Nov 2012 10:39

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I'm not sure yet what I will be racing but 944 SPEC was one of the classes I was thinking about. I'm in South Florida, Miami, so if there are a few races here I will participate.

With that said I'm now have to decide not to use this engine for 944 SPEC or just pull it apart again and replace the pistons.

The engine is off the car still which makes life a bit easier. I have a spare engine I can rebuild. I will sort this out when I'm done with the transmission and suspension.

Thanks for point this out to me while I still have options.

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Re: Piston Skirt Wear

Posted by michaelreich - 14 Nov 2012 11:15

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Eric-

No problem on timing. I can see from the rules discussions, I picked a bad time to post. Speaking as someone preparing a car, I think the rules committee is really considerate not making us chase changing rules. Next year is the year for me, I promise.

First, thanks for the coating answer - that will come off the list!

What is your opinion on the pistons - do you think they are too small as they are? It is funny because they are all extremely tight in their size ranges, but the wear looks different. There is one of them that looks like it has not worn at all. I am wondering if I got the wrong minimum diameter spec. I pulled the number from the OE manual, but I am not sure if that is the wear limit. Thanks for all your help!

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Re: Piston Skirt Wear

Posted by Sterling Doc - 14 Nov 2012 11:25

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Porsche's wear limits are very tight - more so than most, but whether your numbers are problematic is probably a better question for Tim Comeau, or David Dirks, or one of the other engine builders.

Nosfertu - sorry to bring up bad news, but glad you still have options - we'd love to have you on board!

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