

'88 10.2:1 CR is early car

Posted by Aslet - 20 Nov 2009 00:34

I have an '84 944 and want to add '88 pistons to raise the compression. I have been told that the '85.5 and later cars have knock sensors. So, has anyone run this higher compression in an early car without knock detection (running 93 octant)? Any issues?

Thanks

Re:'88 10.2:1 CR is early car

Posted by Sterling Doc - 20 Nov 2009 02:34

I don't believe any 8V motors other than the Turbos had knock sensors. This is done all the time - just use premium fuel, and you should be fine.

Re:'88 10.2:1 CR is early car

Posted by joepaluch - 23 Nov 2009 01:31

no knock sensors on any 8valve car. Turbo cars did have them. If the pistons are the right tolerance group they will just drop into any block. You can run the 88 pistons with any DME, but to be safe I prefer using the 88 DME.

Run at least 91 oct pump gas with 10.2:1 pistons. Running less could be a problem.

Re:'88 10.2:1 CR is early car

Posted by Aslet - 23 Nov 2009 02:43

I am looking into having some J&E pistons made to '88 spec. These should directly go in, correct? They obviously won't have a tolerance group, since they are new...

Re:'88 10.2:1 CR is early car

Posted by Sterling Doc - 23 Nov 2009 02:57

At this point aftermarket pistons are not legal. While I understand you'd have them made to '88 Spec, there are likely subtle differences, and this possibility is what has kept aftermarket pistons illegal to this point. If & when they become allowed, a specific piston would be spec'd out and verified. Sorry...

Re:'88 10.2:1 CR is early car

Posted by joepaluch - 23 Nov 2009 03:53

Aslet wrote:

I am looking into having some J&E pistons made to '88 spec. These should directly go in, correct? They obviously won't have a tolerance group, since they are new...

These are not legal as they are aftermarket pistons. We only allow stock US spec pistons.

Also the tolerance groups have nothing to do with repairs either as they are listed as the same basic size. However to ensure the best fit 3 tolerance groups were created to best match pistons and actual bore sizes.

Here are the factory tolerance groups. Basic size is 100.0 mm

OE Piston Tol group 0, 99.980 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.000 mm

OE Piston Tol group 1, 99.990 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.010 mm

OE Piston Tol group 2, 100.000 mm Comp ratios 9.5:1 , 10.2:1, Cyl bore 100.020 mm

First oversize is 100.5 mm basic size. Again with tolerance group around that as well. Second oversize is 101.0 mm. These oversized pistons are not allowed either.

So if you want 88 pistons you need to get the OE ones either new from Porsche or used from any place you can find them.

I can tell you however that unless you can get a deal on them they are not worth worrying about. Low compression cars run just as fast as higher compression cars as the actual hp difference is less than the typical engine to engine variation. Just make sure whatever motor you have is in good working order and the valves seal properly. This will give you the best chance to run well. Now if and 88 motor or 88 pistons come available I would not turn them down, but I would not pay a much over \$100 premium for

complete 88 motor.

BTW.. I have an 84 and 88 motors and some 87 parts thrown in. My 88 motor was faster than my 84/87 mix when the 84/87 had 20% leakdown in two cylinders. With both fresh I never noticed any difference. The reason I have an 88 motor is because it came in an 88 924S parts car I picked up local for \$330.(Heck the car was close to free once I sold the 16" wheel that came on the car for \$250 and a couple odds and ends) So it was really nice find, but I don't consider my 88 motor more powerful than if I fix the leaky valves on my 84/87 motor.
