

Re: Truth or Hoax?

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On Tue, 20 Jun 2006 11:11:48 -0500, "John Meglier"
<spamless@xxxxxxxxxxx> Gave us:

But turbochargers heat up the air,

Yep. Actually ANY compression of a gas will yield more apparent heat. This is how air conditioning works.

and if too hot causes detonation,
(pre-ignition),

Most (if not all) pre-ignition is not cause by the gas (air) temperature, it is caused by hot spots on valves and combustion chamber surfaces, as well as piston surfaces in some designs.

and in a gasoline engine this puts holes in the pistons.

It puts holes in ANY softer material. If the heads were aluminum, the detonations would pit the combustion chamber surfaces as well.

It can cause all kinds of problems all the way up to and including blowing your intake apart. Usually, low octane bad gas causes burned exhaust valves, which also promote pre-ignition.

A little water injection can cool it down some, but it is easier and safer to just retard the timing.

Which doesn't always work with hotspots. Water ALWAYS works. So do other octane raising additives. Water in the combustion chamber does NOT "corrode your engine". Petroleum fuels give off water when they

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combust, so there is plenty around, a little on the pre-fired side of things won't hurt anything. It is all in how it gets introduced.

but then you don't get full HP out of the engine.

No shit. The WHOLE reason, as I stated earlier, for a higher octane number is not raw power from the fuel as there is actually less. It is that fact that the engine can be set up to make more power.

normal street car can take about 6 pounds of boost before running into detonation problems (atmospheric pressure + 6)

There is no reference for "normal street car". SOME cars have flat top pistons. These can be boosted easily. SOME cars have sculpted piston tops, and these engines cannot be boosted as much, until modifications/trade outs to some of the engine components have been made.

Still, there is no substitute for a real good, high octane number gas. Particularly when boosting. I use to run REAL 104 octane fuels, and there is a significant difference between them and the 85 marked 87 CRAP they are pushing onto us now. No wonder the bastards are making record profits. The fuel quality has gone to shit, and the refinery operator has pimples on his ass from sitting at the desk all day. While our wallets get thinner.

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