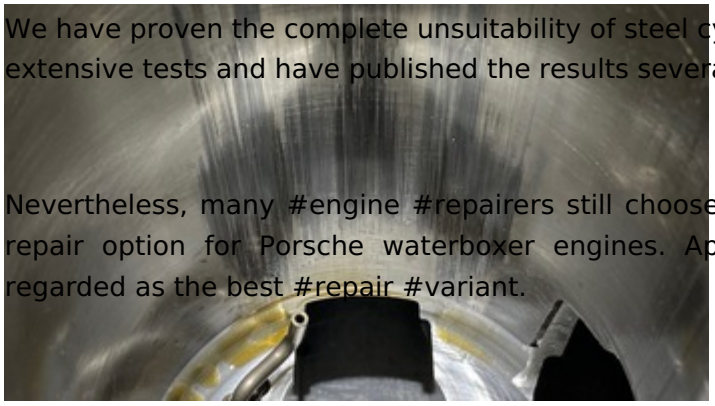
Can steel cylinders be used for Porsche engine repairs?

Beitrag von „Albert Motorsport“ vom 26. Oktober 2022, 10:15

Dear all,

I have repeatedly pointed out in recent years that #steel #cylinders are completely unsuitable for installation in Porsche waterboxer engines. Especially when you are not directly surrounded by the cooling water, but are pressed into the turned Porsche #aluminum #block under high pressure.



We have proven the complete unsuitability of steel cylinders for a solid repair in our company in extensive tests and have published the results several times.

Nevertheless, many #engine #repairers still choose this "cheap" and completely "unsuitable" repair option for Porsche waterboxer engines. Apparently because: "greed is hot" is still regarded as the best #repair #variant.

We receive orders from customers umpteen times a year who, or the previous owners of the vehicles, have had inexpensive Ebay engines installed in advance. The results of these wrong decisions are not long in coming. A long gallop on the highway and the engine is immediately broken.

When we see how #amateurishly these engines are "emergency repaired" in our specialist company, apparently in order to be able to sell the cars quickly and cheaply, I get angry at the intention of simply cheating others.



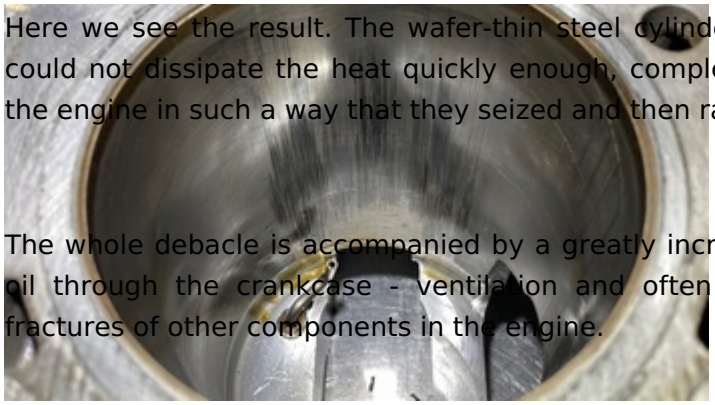
Once again we have received engine damage where the customer only drove the car a few kilometers without the previous owner telling him in advance that the engine had already been repaired.

Of course, again with the unstable, wafer-thin steel cylinders, and again as cheaply as possible, partly with used bearings and again only with insufficiently renewed wearing parts. What should you say to our dear customer, except: "Sincere condolences"?

What happened?

The customer drove the car on the freeway, after which the rattling noise was heard. A rattling noise in the engine is usually a sign of mechanical damage, in this case it is piston seizure on all cylinders.

Piston seizures happen in amateurishly repaired engines when either the lubrication is too low, the thermal expansion of the pistons / cylinders was calculated incorrectly, so that the pistons simply jam inside the cylinders during operation and then break, or the cylinders are exposed to the heat not be able to dissipate to the block or the water fast enough not to block the engine.



Here we see the result. The wafer-thin steel cylinders without emergency running properties could not dissipate the heat quickly enough, completely deformed and blocked the pistons in the engine in such a way that they seized and then rattled.

The whole debacle is accompanied by a greatly increased oil consumption, with the suction of oil through the crankcase - ventilation and often with leaking cylinder head gaskets and fractures of other components in the engine.

Here, in this case, a new complete revision is required. We will try to get the unstable old pressed-in cylinders out of the block without causing further damage. Then we have to use our cylinder graphite material to make cylinders adapted to the block and then install them in the engine with new, forged pistons and new wearing parts.

We very much hope that this is still feasible and will keep the customer continuously informed about the repair status.

Interested parties can follow the engine repair **HERE** online.

HERE for comparison our permanently solid repair principle with now more than 1,200 problem-free installations!

Warm greetings

Juergen Albert

master mechanic