

Cautionary Tales

Contributed by BMWVMCA NEWS
Saturday, 05 April 2008
Last Updated Saturday, 05 April 2008

Cautionary Tales

(Never assume anything) by Richard Sheckler

Piston pin circlips: My son David and I worked jointly on his R60 throughout the restoration. We found a good pair of standard bore cylinders and pistons for it. Luckily, they were within spec. and we ran a ball hone through the bores, got a new ring set from Bench Mark, and put the engine together.

Oh, boy! This bike really ran sweetly. The rings seemed to seat quickly, the engine ran strong! we were off to putting some miles behind us and having a good time with the "wind beneath our wings."

After about a thousand miles, the oil started getting black quickly between changes, the left side began to smoke, the engine lost its snappiness...what was going on?

Last night, Dave pulled the upper end apart. "Dad," he said questioningly, "weren't you supposed to put circlips in the pistons?"

"Huh," said I, "I thought you did."

We each assumed the other had installed the circlips.

Each bore now had four grooves worn into the walls. The pistons are still in fine shape. We pulled the oil pan and inspected its contents. It contained no more than dark brown oil. There was no sludge and no metal flakes or particles of any kind. The rods feel snug in the crankshaft, so no apparent damage there.

This lesson is going to cost about six hundred dollars. Because I was overseeing this project, the money will have to come out of my pocket. Yikes!

We'll sleeve the cylinders, because we'll be using the original pistons. I am suspicious of aftermarket pistons when I know little or nothing about the metallurgy or the manufacturer.

Bore Tech in Batavia, Ohio will be doing the work, so we are having them carbide impregnate the cylinder walls. You can check them out on their website, or by calling or writing to them and requesting some of their literature.

They have sleeved cylinders for me in the past. Their work is first rate. I inquired about some sort of heat transferring substance that would fit in between the walls of the old cylinder and the newly installed sleeve. I heard that some shops will use such a product to counter possible hot spots caused by imperfections in the fit between the two parts. Here is Bill Moeller's answer:

"There are sleeve retainer compounds that have material in them that will help heat transfer if there is a gap or void. We found it is better to have two smooth surfaces with as much squeeze on the sleeve as we could provide, about .002 interference fit. So far, we have not seen traces of hot spots on run cylinders."

Regards,

Bill Moeller
BORE TECH
5977 Hutchinson Road
Batavia, Ohio 45103
513.625.8374

boretech@bore-tech.com

Life should be simple