

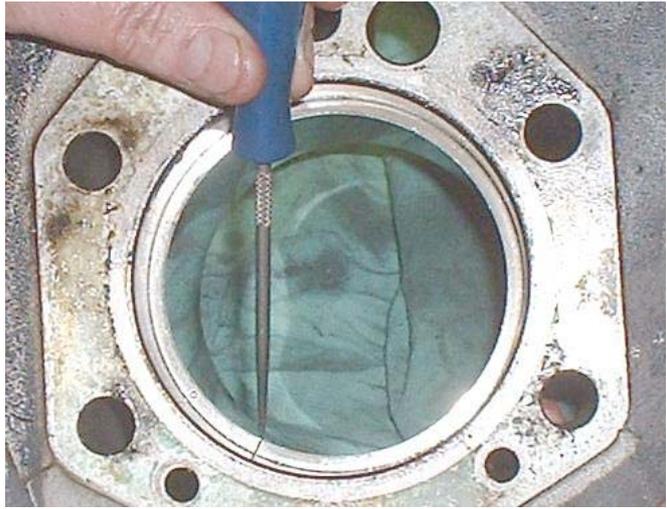
CHAPTER 5: RING CLEARANCE, FRONT MAIN, MEASURE RODS

Posted on the Wildguzzi forum by Pete Roper: December 14, 2005:

Contents: Measure ring clearance, front main bearing, measure rods

Pic 5-1:

Piston ring installed in the bore. Note the end gap of the ring, I'm pointing at it with the seal pick.



Pic 5-2:

To get it square in the bore invert the piston thusly.



Pic 5-3:

And then use the deck to push it about half way down the bore. This will ensure it's pretty square and at the point of maximum bore wear.



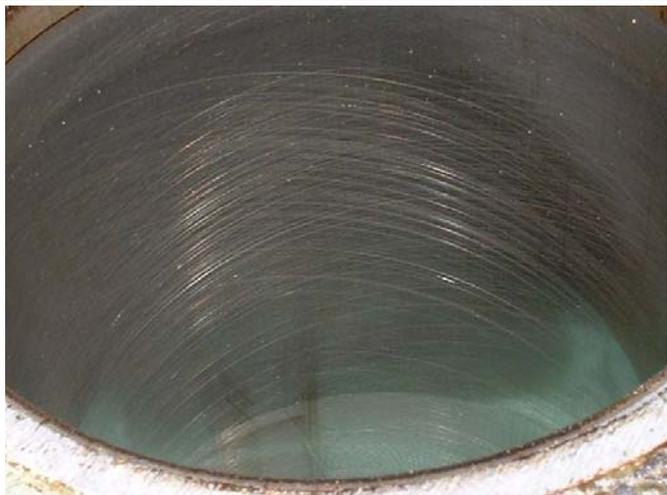
Pic 5-4:

This isn't very clear because the feeler gauge is dead on to the camera but what I'm doing is measuring the end gap with a feeler gauge to see if it is still within spec. You do this for all three rings.



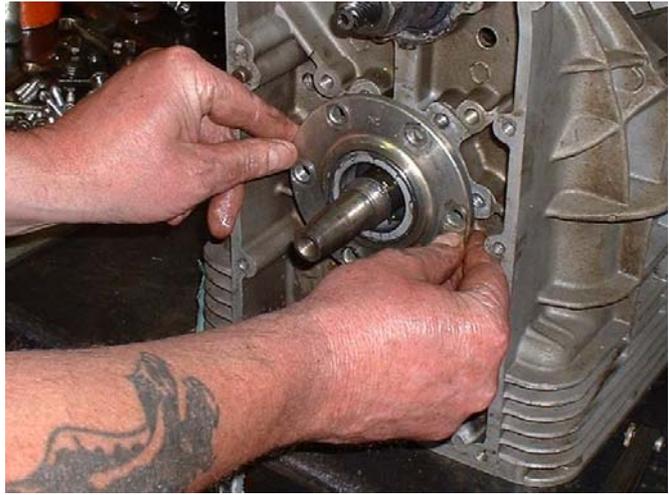
Pic 5-5:

Just a pic of the surface of the bore. I reckon someone has stuck a boron ball hone through this as Nicasil ex-factory has a finer hone pattern.



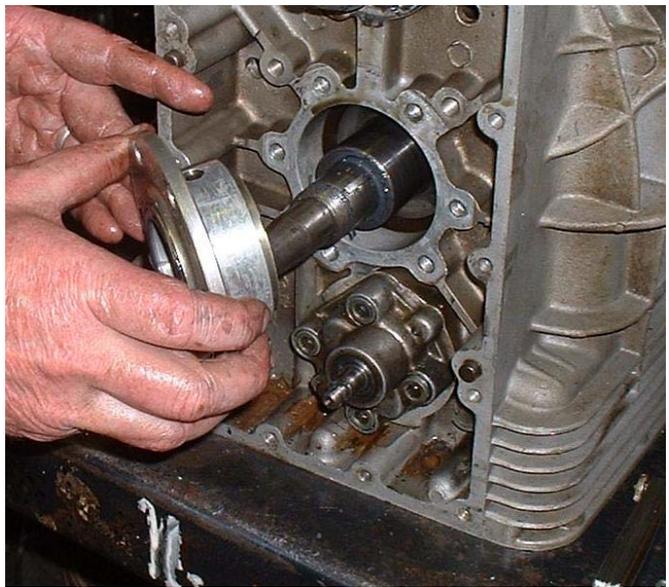
Pic 5-6:

On to the front main. On this block the crank is still in there obviously but you remove the six bolts that hold it in place and simply pull it from the crankcase. Front's usually come out with no fuss. Note there is no gasket as it doesn't matter if it leaks, as it is internal to the timing chest.



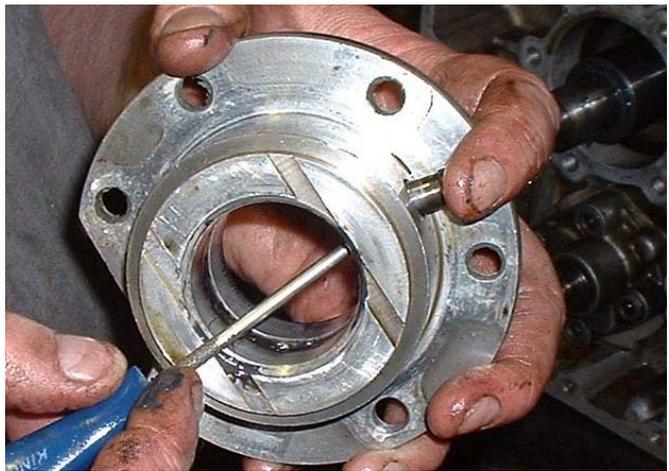
Pic 5-7:

Once out of the case it can be examined.



Pic 5-8:

Don't loose the oil feed/locator dowel!



Pic 5-9:

This little widget is a bore gauge. The arms expand and then can be locked in position. Measure the rod eye with the bolts correctly torqued but no bearings installed.



Pic 5-10A

Pic 5-10B:

In several directions so you can gauge if the eye has been beaten oval. On the case of this rod it has due to the bearings going 'Udders Up' due to lack of oil and the rod then hammering on the crank.



Pic 5-11:

Once the bore gauge has expanded to the size of the 'ole you lock it by turning the knurled knob on the end of the handle. Once withdrawn from the 'ole it can be measured thusly with a micrometer to see how wallaby-ted'ed, (That's 'Roo-ted's brother.) the rod is and whether it is salvageable by re-sizing.



Pic 5-12A

Pic 5-12B:

Little end can get the same treatment.



Pic 5-13:

As a simple but less accurate gauge hold the gudgeon pin in the bush like so and move the *free* end up and down in line with the shank of the rod. Little end dimensions are critical, measured in tenths of thou, if there is anything but the barest detectable movement in the gudgeon then it's new bush time.

