

Lagondaforum: Rocker pin survival rate!

Rocker pin survival rate!

Written by H 54 John at Oct 14, 2013 8:12 pm

I have had my 14/60 for several years with no significant problems. More recently I had the engine professionally rebuilt since when (and I don't imply any connection) I have had two rocker pins fail about 50 miles apart. Whilst the rockers were replaced during the rebuild, the pins are original.

In my understanding, pin failures are rare (more so than rocker failures which themselves are uncommon) and I think that these failures cannot be just random and coincidental. Has anyone had a similar experience? All bright ideas will be much appreciated.

John

Re: Rocker pin survival rate!

Written by Mike Fountain at Oct 22, 2013 11:48 am

Hi John, I had a series of pin and rockers fail a few years ago following the fitting of my new semi downdraft head. The problem was finally traced to a valve guide not fully pressed home. Although when I replaced the broken item I set the correct clearance when the engine heated up the rocker hit the top of the valve guide and then either the pin or rocker broke! As I was on a rally in France at the time I did not fully investigate until I came home. Is it the same rocker/pin failing? Have you had the valve guides changed? I would suggest you check the clearance between the top of the guide and rocker. When I finally found the cause of the problem I took about 20th from the top of each guide.

Re: Rocker pin survival rate!

Written by H 54 John at Oct 22, 2013 3:25 pm

Thanks very much for this Mike. Yes, the guides have been replaced and also the camshafts are high lift which would compound the sort of problem you describe. I hear no sound of touching when the engine is spun on the starter but of course a hot engine and high revs are a very different scenario. I'll investigate as you suggest.

Different pins failed - first #4 exhaust and then #1 exhaust.

Re: Rocker pin survival rate!

Written by Mike Fountain at Oct 22, 2013 4:06 pm

When I had the problem it ran for some time between breakages. If only I had found the cause on the Rally running with larger tappet clearances would have got me home! I guess with the new cams you are already running with at least 10thou clearance.

Re: Rocker pin survival rate!

Written by ray sherratt at Oct 22, 2013 7:50 pm

I would suggest that you have at least .050"/.060" between the top of the guide, and the top cap bottom/split collet bottoms at full lift. The reason for the gap is to stop oil being forced down the guide. Make sure the top of the guide isn't flat, it needs to taper downwards and outwards from the valve bore.

Ray Sherratt.

Re: Rocker pin survival rate!

Written by H 54 John at Oct 28, 2013 11:24 pm

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Mike, Ray,

I've now had a look at one of the valve assemblies and am a bit wiser. The guide is certainly OK - fully seated and a standard 2 litre guide. But I think you are right that there is inadequate clearance between the valve cap and the guide though it's difficult to measure through the springs on full lift as the pockets are quite deeply recessed. I think I'll try the plasticene pad ploy.

Many thanks for the help, much appreciated,

Re: Rocker pin survival rate!

Written by ray sherratt at Oct 30, 2013 8:24 pm

Put the valve at full lift, and arrange a suitable lever to open the valve further. If you have a dial gauge and a base to mount it with, set the gauge on the top cap, set to zero and lever the valve open, take a reading. You need at least .050" more. If you have a high lift cam also check for valve spring coil bind.

Ray Sherratt

Re: Rocker pin survival rate!

Written by H 54 John at Nov 02, 2013 12:57 am

Ray,

No dial gauge but plasticene suggests the clearance is much less than 50 thou. At least I now understand the pin failures.

Thanks for the help, much appreciated.

Re: Rocker pin survival rate!

Written by ray sherratt at Nov 02, 2013 11:09 pm

Thanks John just trying to help

Ray.
