Lagondaforum: 2 litre cylinder compression question

2 litre cylinder compression question

Written by Peter Hunt at Feb 20, 2014 11:22 pm

I'm currently negotiating to buy a 2 litre LC tourer and ran a compression test on it to be sure of the engine condition. The readings were 100, 60,100,120 psi. There is no sign of emulsion in the oil but the engine runs quite rough. The offending cylinder plug looked a decent colour. Should I be worried?

Re: 2 litre cylinder compression question

Written by mandb57 at Feb 21, 2014 12:08 pm

Hello Peter

I have owned a 2 Litre High Chassis for many years and covered a high mileage with the car. On a recent trip to the Czech Republic I heard a slight knocking noise which came from the engine.

We got back to the UK without any issues although the noise became louder.

Prior to stripping my very well used 2 litre engine late last year, to identify what had gone wrong, I did a compression test and all my cylinders were around 120 psi which is more or less what I would have expected for a car which had done over 100,000 miles since it was last stripped down.

The horrible knock was caused by a failure of the white metal on the big ends

A reading as low reading of 60 psi would give me concern and needs to be investigated further. Ideally all the compression's should be the same and normally are unless there is a problem.

To resolve the issue you would need to investigate further as there are a number of things that could be causing the problem.

If you require any further information please ask.

Mike Heins

Re: 2 litre cylinder compression question

Written by Peter Hunt at Feb 21, 2014 3:05 pm

Mike, thanks for your repsonse and it's good to hear that these old machines are still capable of high mileages. I have ordered a leak down tester to pressurise the cylinders in the hope that the escaping air might point to where the problem lies. At worst I suppose it could be a cracked block and at best a question of the valves not fully seating through poor valve clearances with a number of other causes in between. I was surprised how rough the engine ran as I suspect these run very nicely when set up correctly. It certainly starts well. I should add that the compression test was run cold but when I checked the 60psi cylinder after a run it was down to 50 psi which I would imagine is barely enough to cause a meaningful explosion in the cylinder.

Re: 2 litre cylinder compression question

Written by Colin M34 at Feb 23, 2014 10:52 pm

Hi Peter

2 litre Lagondas are delightful cars and I would echo everything that Mike has said. I think you must assume that something is wrong with one of the valves or seats. I had this problem last year and my engine also ran rough. I had hardened exhaust seats fitted when I fixed it. I was also surprised how rough some of my valve guides were.

Therefore you should reckon on taking off the head and checking or possibly replacing valves and/or springs. I have had springs break and so that is the thing to check first. All the parts are available from the club and in the event of a cracked head, we might be able to find you a replacement one.

Colin M34

Re: 2 litre cylinder compression question

Written by Peter Hunt at Feb 28, 2014 6:27 pm

Well the leak down test pointed to Mike's suggestion of a valve problem. Infact two exhaust valves were leaking so badly there was barely any

compression hence the poor running. Sadly I had to walk away as the prospect of explaining to my wife why, having spent twice the cost of my first house on an old car I was now consigned to the garage for a couple of weeks, was not not an attractive one. Hence I am still in the market for a Lagonda but one that will work long enough in the short term to satisfy my wife that I have not lost my marbles. I am sure I'll regret it as a cylinder head job is not one that I would normally shy away from.

Re: 2 litre cylinder compression question

Written by mandb57 at Feb 28, 2014 8:56 pm

Hello Peter,

Thank you for letting us know what the problem was.

I am sure you WILL regret not buying the car especially as to sort out valve problems on a 2 Litre is very straight forward. It is possible to remove the cylinder head without effecting the timing which makes life very much easier.

I wish you the best of luck in your ongoing search for another car.

Mike

Re: 2 litre cylinder compression question

Written by Colin M34 at Mar 04, 2014 10:35 pm

I also endorse Mike's enthusiasm for Two Litres, We both have HC models and IMHO is one of the best sports cars made in the 1920's. They are still good value compared with many other classic cars.

Colin

Re: 2 litre cylinder compression question

Written by Peter S30 at Apr 30, 2014 7:55 am

I was looking for a 2 or 3ltr LC for a long time and I fell in love with this one (especially the red leather..) compression problems or not. There was quite some work to do on the cylinder head and I was very happy that a good friend and Lagonda Club member did this for me. The car came with 2 cylinder heads, the one mounted is downdraught but the standard one came with the car. Both needed new seats, valve guides, valves etc. There should be thimbles on the valves which were missing too. Putting them in changes the timing so this had also to be redone (front cover of engine off). It runs good and strong now, with good oil pressure. There will be some more little things to do and you will certainly find now some more contributions in the 2ltr section !

Attachments:

IMG_5590.JPG (filesize: 136.43 KB)
IMG_5599.JPG (filesize: 149.46 KB)
IMG_5609.JPG (filesize: 94.58 KB)
IMG_5610.JPG (filesize: 111.79 KB)
IMG_5626.JPG (filesize: 115.87 KB)

Re: 2 litre cylinder compression question

Written by SRD at Apr 30, 2014 8:33 am

Peter hi

Congratulations on Lagonda No 3 ...

Looks a good choice and a fine car indeed, your patience paid off waiting.

Kind regards

Simon

Re: 2 litre cylinder compression question

Written by oakley at May 06, 2014 5:34 pm

Hello Peter, I see from the photo that you used a protractor on the front pulley for timing the valves - although it does work it's not as accurate a doing it from the ring gear.

I wrote a simple manual for doing the job and if you're interested I could mail you a copy.
