

## Lagondaforum: Duralumin Connecting Rods for 16/80 engines

### Duralumin Connecting Rods for 16/80 engines

*Written by Colin M34 at Jul 14, 2008 12:11 am*

Hi here everybody.

The 16/80 'motor' section was looking empty so I thought readers would like to see my lovely new con rods!

As many of you will know, Duralumin con rods were fashionable in the 1930s, mainly because they were lighter. Not only were they used on the V12 but also on the 3.5 litre and the 16/80. Unfortunately, they give a number of problems. After 70 or so years the metal can fatigue, and unlike steel, this is not easily detected using inspection techniques. A specific problem is that the nip for the big end shells has to accommodate a higher coefficient of expansion, and is not always understood by engine repairers. This can lead to disasters!

The best solution is a new set of rods and I have just received my new ones from Phoenix in Slough. The first photo shows my old rod on the left and the new one in the middle. The rod on the right is a dire warning regarding the nip problem. This happened in a friend's 16/80 engine. It looks as though the bonze shell holding the white metal bearing was not adequately anchored and shifted slightly, causing the bearing to seize with the disastrous results to the rod.

The second photo shows my lovely new set of Phoenix rods. These have been designed to take MGB thin walled big-end shells. I am delighted with them. I have cleaned my pistons, which I have re-ringed and am now reassembling the engine. I hope I never have to take it to bits again!

I like my 16/80. It's totally different from my 2 Litre. The latter is a 'thumper' whereas the 16/80 is very smooth and revs well. I fully agree with Arnold Davey's comment in his book that a 16/80 probably accelerates as well if not better than a blown 2 litre. In this respect it has similar characteristics to a Rapier and I am sorry mine does not have a pre-selector gear box.

Cheers

Colin

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#### Attachments:

[Dural con rods.jpg](#) (filesize: 206.00 KB)

[rods and pistons.jpg](#) (filesize: 288.62 KB)

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### Re: Duralumin Connecting Rods for 16/80 engines

*Written by DouglasFox at Jul 15, 2008 5:57 pm*

Hi Colin,

On Lagonda Club advice (Brian Savill) I fitted Phoenix conrods to my 16/80 four years ago because of the Duralumin hazard. A major advantage is the move from white metal to shell big end bearings (mains remain white metal). Attached a set of pistons specially ordered from JE Pistons in the US (again on Brian's advice). Both expensive but exceptional quality and well worth it for performance and peace of mind.

Douglas Fox

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