

Silicon Heads etc.txt

dave bushell

Joined: 09 Jun 2004

Posts: 111

Location: Caterham, Surrey

Posted: Mon Sep 20, 2004 8:10 pm Post subject: Blind Head Engines

Hi All

Can anyone advise me on the best way to fit the water-cooled head to blind head barrels? In what order should it be set up? Are "O" rings better than copper asbestos washers around the plug ferrules etc.

Dave Bushell

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Roger Moss

Joined: 31 May 2004

Posts: 242

Location: Leicester UK

Posted: Thu Sep 23, 2004 3:12 pm Post subject: Heresy from Roger

Hi Dave

Herewith heresy!

Nearly a century ago, Alfred had to use the available resources, but he showed himself to have an original and inventive mind that was unfettered by the conventional wisdom of the day.

I suspect that if Alfred had had silicone sealant available, he would never have used gaskets.

So,-- Off to Wilko for a cartridge of silicone sealant!

I put my engines together with it and it works fine.

I use High Temperature Silicone sealant for the exhaust flange.

I remember when I was a young man starting in engineering and mentioned using Loctite for some applications, instead of waiting hours for the gnomes in the jig boring dept to work their occult magic -----

Crucifixes were raised in the face of such heresy!

Now it is generally accepted.

I'll bet Alfred would smile!

Kindest Regards from the Twenty First Century!

Roger

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dave bushell

Joined: 09 Jun 2004

Posts: 111

Location: Caterham, Surrey

Posted: Thu Sep 30, 2004 5:51 pm Post subject: boundary letter

Hi Roger

Thanks for the response to my query. Sorry for the delay in thanking you but I've been in hospital until today with a ticker thats been over-revving! I'll be putting the block back together as soon as I'm allowed back in the garage.

Regards
Dave

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Roger Moss

Joined: 31 May 2004

Posts: 242

Location: Leicester UK

Posted: Thu Sep 30, 2004 9:12 pm Post subject: Get well soon Dave!

Hi Dave. When you have a young mind in an ageing body, you always expect more than you should.

I remind myself that if I had an elderly car and I wanted it to last, I would treat it with consideration. Why do we, who are supposed to be thinking animals, so consistently fail to heed our own advice.

So-- go carefully, we need folks like you around for years yet!

As regards silicone. It does work. I even fit my heads with a four thou thick shim steel ring x 1/4 radial depth round the bores after I have smeared all round with silicone. Then nip down and allow to set. Then pull down. You could actually cut rings out of aluminium coke cans!

As regards water domes, then I hav'nt used these for a bit and I should add that silicone is ok where you only have a small gap. So with the water dome, you might use an O ring round the ferrule of a size that gives about a 25 thou gap before nipping down, then smear round other areas with silicone, then nip down lightly, wipe off excess sealent squeezed out, leave 24 hours, then pull down tighter.

The beauty of using silicone like this, is that after you have lweft it for 24 hrs lightly nipped, you have a cured gasket that is exactly the correct thickness. If the faces are not flat, it doesn't matter.

Kindest Regards
Roger

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dave bushell

Joined: 09 Jun 2004

Posts: 111

Location: Caterham, Surrey

Posted: Fri Oct 01, 2004 1:59 pm Post subject: Blind Head Engines

Roger

Thankyou for your kind advice, on both types of engine - human and Scott!
I was about to email you on the tecnique that you used for fitting the

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water-jacket on blind heads, but you've just done that. Many thanks for your time and trouble.

Regards
Dave

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Mike Fennell

Joined: 22 Jun 2004

Posts: 7

Location: Essex

Posted: Mon Oct 04, 2004 1:24 pm Post subject:

Roger : Just an extra query on this subject - who or what is wilko?
and what brand/type of silicone do you buy from him?

Mike Fennell

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Roger Moss

Joined: 31 May 2004

Posts: 242

Location: Leicester UK

Posted: Mon Oct 04, 2004 2:58 pm Post subject: wilko ??

Hi Mike, Now I am not sure if you are pulling my leg, or if the wilkinson chain of hardware stores have not reached your area. I suppose I could have said B&Q Type of silicone?

Well to be honest I have always just used domestic transparent RTV (Room Temperature Vulcanising) general purpose silicone in a cartridge.

More or less what you use to seal the bath! But be wary, because there are many less expensive sealants that are not based on silicone and will not stand the heat. I also use this to seal the exhaust, ie no gasket, just metal on metal with the silicone. Must have saved a fortune on gaskets over the years! To be fair, it was necessary to find another way.

If you look at the skirt thickness of a 600 barrel at top +60 overbore. That is 3" with silk pistons, it is very thin and frail. As I make Aluminium blocks, I increased sizes to give a decent skirt wall. In this case, the conventional cork rings do not fit. I just run a good bead of silicone round the sholder where the cork ring usually sits. I never had a problem. It would be interesting to fit a Detachable head as I do with thin shim rings instead of the thick copper asbestos gaskets. As long as the pistons do not hit the top, it could give a nice compression boost. The last time I was in town, I called into a plumbers merchant and bought a cartridge of Dow Corning silicone "Flue Sealer". This is a silicone made with special attention to sealing flues near stoves such as AGA etc. I thought I would try it out. It was not expensive and might have a marginally better performance on exhaust flanges..

I should perhaps add that I always degrease well before using silicone sealant or Loctite. Paul Dodds brought some expensive silicone sealant sold as a gasket substitute to a race meeting. It was many times more expensive than the cartridges I buy and did nothing different, except it set harder and was a swine to clean off when you dismantled things, then wanted to clean for re assembly. It works for me folks!

Kind Regards
Roger Moss

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