

Special Bearing - Burman Gearbox.txt

alex.helf

Joined: 31 May 2004

Posts: 47

Location: Austria EU

Posted: Mon Feb 12, 2007 4:40 pm Post subject: Special Bearing

Hello!

I'm searching for s special ball-bearing.

outer diameter: 2 1/4"

inner diameter: 1 1/16"

width: 5/8"

It is for a BURMAN 3speed box from approximately 1932.

Has anybody an idea where I can buy such a bearing?

lg,

Alexander

Last edited by alex.helf on Mon Feb 12, 2007 9:49 pm; edited 2 times in total

Back to top

efr215

Joined: 06 Nov 2004

Posts: 89

Posted: Mon Feb 12, 2007 7:52 pm Post subject:

I've never done any business with them but maybe
<http://www.obsolete-bearings.com/> might prove useful?

Back to top

malcwebb

Joined: 31 May 2004

Posts: 7

Posted: Mon Feb 12, 2007 8:45 pm Post subject:

Alex

I have used and would recomend: vintagebearings.co.uk who are based in Derbyshire, UK. If they haven't got the exact bearing they can usually help with an alternative.

There is, confusingly, a German Vintage Bearings Company site on the Internet. Sure you will get some joy from one of them!

Malcolm

Special Bearing - Burman Gearbox.txt

Back to top

alex.helf

Joined: 31 May 2004
Posts: 47
Location: Austria EU
Posted: Thu Feb 15, 2007 8:09 am Post subject:

The answer from obsolete-bearings:

SORRY UNABLE TO HELP ON THIS ONE
THE STANDARD BEARING IS 1"BORE X 2.1/4" OUTSIDE X 5/8" THICK (RHP REF NO.LJ1")
THANKS DAVE
BEARING + ENGINEERING SERVICES LTD

Back to top

Erik

Joined: 10 May 2005
Posts: 105
Location: Moerdijk, The Netherlands
Posted: Thu Feb 15, 2007 9:54 am Post subject:

I have send an email to a Dutch specialist on difficult bearings. Keep you posted!

Erik

--- Read all about the Dutch Scott Run 2007 here! ---

Back to top

alex.helf

Joined: 31 May 2004
Posts: 47
Location: Austria EU
Posted: Thu Feb 15, 2007 10:06 am Post subject:

Thanks ERIK let me know when you've got news!

Alex

Back to top

Erik

Special Bearing - Burman Gearbox.txt

Joined: 10 May 2005
Posts: 105
Location: Moerdijk, The Netherlands
Posted: Thu Feb 15, 2007 11:51 am Post subject:

Well, they were quick with their answer... but not what you would like to hear!
They could not even find the bearing in the 1940-s catalogues...

I'm sorry!

Erik

PS: a lot of bikes used the burman boxes (in fact my 1927 Ready has one too, see pic). Maybe one of the spares schemes of other make clubs?

PS2: Ich dachte, ich suche auch mal auf dem Forum von motoclub.de aber das hast Du selber auch schon gemacht...

--- Read all about the Dutch Scott Run 2007 here! ---

Back to top

Ian Parsons

Joined: 10 Jun 2004
Posts: 33
Location: Northamptonshire
Posted: Fri Feb 16, 2007 9:38 am Post subject:

If you know of a good precision grinder it may be possible to get the standard bearing quoted ground out in the bore from 1" to 1 1/16". Possibly a last resort as the experts will comment on concentricity etc. but it will keep the bike running. One can fill the space where the balls are with wax of carefully dismantle the cage.

I have had this carried out on a taper bearing for the headstock of a velocette where the top one is the standard 1" size but the lower one 1 1/16"

Back to top

efr215

Joined: 06 Nov 2004
Posts: 89
Posted: Fri Feb 16, 2007 11:14 am Post subject:

Like Ian Parsons I too have resorted to the cylindrical grinder in the past, it does work even if it seems drastic, but it requires a lot of care and if you've not got a good grinder in the shed, expensive! The down side is the possibility

Special Bearing - Burman Gearbox.txt

of even a small amount of distortion being introduced into what is a very accurately made item with little room to accommodate any such shape changes.

But all is not entirely lost. What about using a standard 6006 bearing and making steel sleeves to make up the difference?

The 6006 principal dimensions are 55 x 30 x 13. It has a quoted dynamic load rating of 13.8kN which should be plenty surely?

In order to use the biggest undersize bearing the re-sizing sleeve thickness needs must be kept as thin as possible and I'd suggest using something a bit better than standard mild steel here because of that. Maybe something like 080M40 might do the business.

The benefits? The 6006 bearing is a standard size and therefore comparatively cheap. With access to turning facilities producing the sleeves is a straight forward and cost effective turning exercise, with a bit of care and a drop of the Loctite type adhesive it should be problem solved.