

Untitled

Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Sun Jan 06, 2008 9:15 am      Post subject: Correct chain size primary two speeder

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Could anyone tell me the correct chain size for the primary chains of a two speeder?

I measured my chain and the roller diameter is ca. 8,47 mm and the roller width is ca. 5,45 mm. When I look in the modern chaintables I cannot seem to find it.

The SOC spares scheme sells two speed primary chain as 1/2 x 1/4 but in the chain tables this equals to a 420 chain with roller diameter 5/16" (7,94 mm) and 1/4" roller width (6,35 mm).

Can anyone enlighten me? I went through Technicalities but did not find anything useful but I think I once heard that this chainsize was a bit different.

Thanks,  
Erik

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Last edited by Erik on Sun Jan 06, 2008 12:36 pm; edited 1 time in total

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Ian Parsons

Joined: 10 Jun 2004

Posts: 64

Location: Northamptonshire

Posted: Sun Jan 06, 2008 10:39 am      Post subject:

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I have just measured a Spare low gear drum and sprocket and some chain I have.

The chain is a

Reynolds No 111 046 1/2 in pitch, 0.305 in roller dia 0.192 in width between inner plates.

This is from their catalogue.

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Ian Parsons

Joined: 10 Jun 2004

Posts: 64

Location: Northamptonshire

Posted: Sun Jan 06, 2008 10:40 am      Post subject:

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I have just measured a spare low gear drum and sprocket and some chain I have.  
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Reynolds No 111 046 1/2 in pitch, 0.305 in roller dia 0.192 in width between inner plates.

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Sun Jan 06, 2008 12:57 pm Post subject:

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Mmm, thanks Ian.

That would mean I have the wrong size chain on my bike. Perhaps wise to change it while the gear is out of the frame already.

This does not seem to be a normal type motorcycle chain. I guess I would have to buy me a length of industrial chain for this?

Regards,  
Erik

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Sun Jan 06, 2008 9:38 pm Post subject:

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I did some more measuring and my LG sprocket is 4,99-5,00 mm thick. So a 0,192" chain would never fit..?!?

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Ian Parsons

Joined: 10 Jun 2004

Posts: 64

Location: Northamptonshire

Posted: Mon Jan 07, 2008 4:46 pm Post subject:

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I have checked the thickness of my low gear sprocket and it is 0.181 in or 4.60 mm. This is correct for the chain I mentioned. I suspect that your sprocket is a replacement made out of the incorrect thickness material. I wonder what the width of you flywheel sprockets are.

I fitted a 40T low gear sprocket to my 2 speeder. I got this and chain from Sprockets Unlimited. [www.sprocketsunlimited.com](http://www.sprocketsunlimited.com)

The English chain size is 1/2 x 3/16

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Mon Jan 07, 2008 7:22 pm Post subject:

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Thank you Ian for the effort!

Although my LG sprocket looks very original it obviously is not right. Because it was pretty worn I already ordered a 42T one from Ken Lack. Hope it arrives soon.

I also tried to measure the HG sprocket. This is rather difficult as the beaks of my vernier caliper are too wide to fit in the space between the sprocket and the drum. When trying to calculate it this one also results in 5 mm width. And also looks original (or at least old) and in very good condition. The chain that is on my bike now fits this sprocket perfectly which also indicates a 5 mm width.

But 5 mm width does not appear in any chaintables... I have send sprocketsunlimited an email to see if they can help.

So I guess I will have to get me a piece of 1/2x3/16 chain and see if this fits on the flywheel sprockets. If so, those would be original. If not, those would also be 5 width. At least I can do this without taking the flywheel out.

When the flywheel sprockets also are of 5 mm thickness I guess it would be wisest to make or get a new 5 mm wide LG sprocket and use the chainsize that is on my bike now. If the flywheel sprockets are the original 4,6 mm width I might want to change the HG sprocket and fit 1/2x3/16 chains all around.

Or are there any other options I am missing?

Regards,  
Erik

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dave bushell

Joined: 09 Jun 2004

Posts: 231

Location: Caterham, Surrey

Posted: Tue Jan 08, 2008 6:11 pm Post subject:

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Hi Erik

I have just looked in my Scott Spare Parts books for 1925 & 1928. In both books it states that the chain size is 1/2" x .205". With either 72 or 78 links for the low gear and 66 links for the high gear chain.

My rough calculation makes .205" = 5.207 mm.

The Reynolds chain number for this size of chain is 110 044. The following data is given :-

Pitch 0.5", Roller dia 0.335", width between inner plates 0.205",

Nominal Sprocket tooth thickness 0.189".

Hope this helps!

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Tue Jan 08, 2008 7:00 pm      Post subject:

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Well Dave, it seems like you just made my day! The chain you describe seems to fit the size of my chain. Pitch and roller diameter are the same. The width between the plates could well be the same too. With my chains still in the bike it is very difficult to make a very accurate measurement (just tried again...).

So my chain might be ok after all. The LG sprocket is too wide (as is clearly visible from the wear pattern) but this will be changed anyway. Now it should just be a matter of finding a few links to lengthen my chain because of the change from 40 to 42 T sprocket. All chains fitted are practically new so I do not intend to change them if not necessary.

Thanks again guys for all the help!

Regards,  
Erik