

Gearing.txt

Richard Moss

Joined: 12 Nov 2004
Posts: 43

Posted: wed Jul 26, 2006 6:56 pm Post subject: Final Drive Gearing..

The Bike that i have the exhaust issue with is a 596 cc 1949 Flyer and we have rebuilt the engine, with our cranks, but otherwise with no upgrades at all. I took it for a test ride last week and with a wideline box, 1st was low enough to pull a caravan up the side of a (very steep) cliff, and nothing else, 2 nd was where first felt like it should have been and third meant that i really didnt see a great deal of pleasure(or in fact anything at all!) over 50mph. I found it had a 19 tooth sprocket on the outrigger, and the big rear late shipley hub runs a 40 tooth sprocket. It also runs, as standard, a 20tooth on the flywheel.

To my mind it was unusable.. Is this really what they came out the factory with ?

I just put a 21 on the outrigger and the bike is beautiful, transformed... I mean if they all came out with this gearing arrangement.. is it possible that a lot of people are putting up with having to rev their bikes unecessarily?or .. is this sidecar gearing?!?!

We dont have very standard machines ourselves, so it was just the fact that ive been working on a complete standard bike for a customer that brought it to my attention..

Of course i understand that my box is wide, but i still found myself pottering about at very low speeds in 3rd (which is always the same 1:1) after i changed to a 21.

any comments..?

Last edited by Richard Moss on Thu Jul 27, 2006 3:32 pm; edited 1 time in total

[Back to top](#)

Jan Buchwald

Joined: 31 May 2004
Posts: 65

Location: Danmark

Posted: wed Jul 26, 2006 9:22 pm Post subject:

Hi Richard

The book of the scott (I have the "Latest edition") page 58 have a list of the gearings.

As I read it, with a 19 tooth sprocket, 4,62 revolutions should give 1 wheel rev, where as a 20 tooth sprocket it is 4,40 rev per wheel rev

22 tooth means 4,00 rev per wheel rev.

And so on (on a wide ratio box).

Best wishes

Jan B

1956 Birmingham Scott, frame no. S 1060

[Back to top](#)

Gearing.txt

Erik

Joined: 10 May 2005

Posts: 89

Location: Moerdijk, The Netherlands

Posted: Wed Jul 26, 2006 9:40 pm Post subject:

Hi Richard,

My 1927 Flyer had the exact same specs as the bike you describe. So a wide box and:

- flywheel: 20 T
- clutch: 44 T
- outrigger: 19 T
- rear: 40 T

I always thought it revved quite high doing about 55.... Much higher than my mates 28 Flyer with the same gearing besides a 22 outrigger...

So, I guess, it was pretty standard...just like in the BOS.

After my enginework is complete I'm gonna try:

- flywheel: 22 T
- clutch: 44 T
- outrigger: 21 T
- rear: 40 T

That should be a lot nicer to ride!

Erik

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

Back to top

Ian Parsons

Joined: 10 Jun 2004

Posts: 31

Location: Northamptonshire

Posted: Thu Jul 27, 2006 1:46 pm Post subject:

My 596cc TT Rep runs with a 21T gearbox sprocket. All the other sprockets are as standard and this gives a top gear of 4.8:1. With a 3.25 x 19 rear tyre this gives a speed of 72ph at 4000 rpm, 90 at 5000 rpm. I would like to try a 22T sprocket but I think this would be close to over gearing it

My 498cc 2 Speed Sports Squirrel also has a 21T drive sprocket and a 3.00 x 20 rear tyre but in this case 4000 rpm is 80mph due to different rear and high gear sprockets giving a 3.93 high gear. This is possibly slightly over geared.

Oddly enough on my track sessions at the VMCC Mallory Park event I felt happier at using the TT Rep at high revs than the 2 Speeder. I held the 2 Speeder back

Gearing.txt

on the straight when I could have gone faster (65 - 70mph?) whereas on the TT Rep I think I sometimes touched 80. As I was only demonstrating I was more interested in the cornering than out and out speed

Back to top

Richard Moss

Joined: 12 Nov 2004

Posts: 43

Posted: Thu Jul 27, 2006 3:24 pm Post subject: outrigger sprockets

I ordered a 21 tooth outrigger from Scott Owners Club chair and spares scheme organiser Gill Swann yesterday and Today it arrived!
I have to say, for my money, If you are running a 19 tooth outrigger to a 40 tooth final drive sprocket.. this is probably the best £40 you could invest in terms of the pleasure you will get out your bike... unless you like revving your engine of course!
I havent fitted it yet so assuming it fits.. which i am sure it will, It is a really nicely make item, hardened and ground... all for £40!
Maybe i could do sales work, but i think its amazing value.
check it out here

of course you can still keep the 19 in case you need to put that double adult chair back on.

Spares Scheme contact details here..

Back to top

Erik

Joined: 10 May 2005

Posts: 89

Location: Moerdijk, The Netherlands

Posted: Thu Jul 27, 2006 5:18 pm Post subject:

I can confirm it fits nicely! I just fitted mine a few weeks ago.
I've documented the fitting on Flying Squirrel.nl . You'll find details, pictures and even a video clip in the "Modifications-section" under "Outrigger sprocket"

Erik

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

Back to top

dave bushell

Joined: 09 Jun 2004

Posts: 112

Gearing.txt

Location: Caterham, Surrey

Posted: Sat Jul 29, 2006 4:41 pm Post subject: Final drive gearing

Hi Richard

I can confirm that when my 1948 Scott came out of the factory it was fitted with a 21 t final drive sprocket. I later fitted a 19t final drive sprocket when I added a single seat sidecar. Both my 1938 and 1957 Scotts have 21t sprockets for solo use.