Lagondaforum: Smiths rev counter drive off of Rotax AT146 dynamo?

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Written by 29invicta at Feb 20, 2019 6:01 pm

Hi everyone -- I'm restoring my Dad's old 1929 Invicta 4.5 litre high chassis, and we're in the process of replacing the old 8-hour clock with a smiths rev counter. Since there's never been one on the car before, we will need to add a rev counter drive to get the count.

On good advice, we've heard that "you can take a drive off the rear of the dynamo I think - I have a feeling some Lagondas are done that way? In which case, you would need the little drive gearbox that bolts to the rear of the dynamo in order to achieve this, if your dynamo does not have that. You may need to ask the Lagonda Club about that option?"

So, does anyone out there have one of these drive gearboxes that goes on the end of a dynamo? Here's a blurry shot of the end of our dynamo (showing the shaft end, and also 3 mounting bolt holes).

Maybe it's like the one in post 1155 ?

Also, here's a shot attached of one off a CAV dynamo being restored at CDRC Ltd (the nice shiny-looking one on a bench)

If you can send pictures or give us a lead on buying or building one, I'd really appreciate it!

Attachments:

lagonda dynamo IMG_0636.jpg (filesize: 52.99 KB)

!cid_image004_jpg@01D4BD2D.jpg (filesize: 33.90 KB)

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by Mark at Feb 20, 2019 7:24 pm

I may be wrong but I do not believe the Meadows engine, as fitted to Lagonda 4.5 Litre cars, used a dynamo driven rev counter.
However, I believe Speedograph Richfield in Nottingham can supply a dynamo mounted gearbox for a rev counter. Worth giving them a call.
Hope this helps
Regards
Mark

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by 29invicta at Feb 20, 2019 11:44 pm

Thanks Mark! I actually have been in touch with them, and they don't have anything "off the shelf" for the application. So, I think we need to put something together (?!). The other possibility mentioned by Jo Moss Kitcher was getting the rev count "...from the back of the crankcase on the right hand side - in which case it takes its drive from the oil pump drive (so in other words, the gear on the camshaft that drives the oil pump also has a shaft going upwards - which mates with a slot to drive the rev counter) Have a look and see if there is a 'blank' plug screwed into the top face right at the rear of the crankcase close to the edge of the cylinder block, or whether there is a brass screw thread attached to the blank - if there is, then the drive is already there."

Does anyone out there have a rev counter set up this way, and would be willing to share photos? Thanks --

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Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by Mark at Feb 21, 2019 5:57 pm

If you send me a personal message thru the forum I will send you photos of the installation to which you refer.
What Jo describes is how Lagonda drive the rev counter in the Meadows engine. It is part of the crankcase on the rear right hand side.

If you are not already a member joining the Lagonda Club could be a good move. They have a significant spares stock for the Meadows engine and you could advertise for the parts you need to drive the rev counter.

Regards

Mark

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by Rich5ltr at Feb 22, 2019 11:55 am

Hi Ted, as well as joining the Lagonda Club (which I also strongly recommend) there is a healthy Facebook Group (if you do Facebook) where you can also ask for advice and assistance. Look for the Lagonda Owners Group. Is it a closed group which means you have to request to join but with 376 members there's lots of well informed people to offer advice.

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by 29invicta at Feb 22, 2019 3:57 pm

Thanks Rich! I actually did join the Lagonda Club last year (at the suggestion of a couple of Invicta Car Club members), and so far I've been positively impressed both by the website's resources and the member's commitment to the marque (love reading about all those trips through Spain, Australia, etc)... While I hope someday to bring the car back to England for a grand tour, I'm also hoping that I can drive around Japan -- my wife's home -- for a while too: good thing it's RHD! But before that, I need her roadworthy, and the rev counter is really to help in understanding the shift points, engine behavior, and give my soon-to-drive 15 year old son a visual reference point for shifting.

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by Southy66 at Mar 20, 2019 2:56 am

Hello Ted,

I know someone with an Invicta local to me here in Australia I'm happy to give him a call to ask about how the rev counter on his car is arranged. Following that, perhaps I can put him in contact with you directly.

All the best, Mike

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by 29invicta at Apr 11, 2019 3:50 am

Hi Mike -- yes, that would be quite helpful since unfortunately the Invicta Club doesn't have a site online yet for sharing ideas, and there's only a few owners here in the US that I know of (one out East, and one in BC Canada, and I'm stuck in the middle here in Detroit!).

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by 29invicta at Apr 14, 2019 11:11 pm

Hi -- I'm still trying to find the right setup for getting the mechanical rev counter reading off the engine. Here are some photos from the rear of the engine under the firewall. Does any of this look like the place to install a hook up a cable or install a drive?

first I have a shot of the firewall, showing where the hole for the rev counter drive cable is next to the speedo cable

second I have a photo of the driver side rear of engine. Is that round plug where it might go in?

then I posted a photo with the layout under the firewall behind the engine, showing all the connections available.

finally, I took a shot of a mystery connection on the passenger side next to a supplementary oil supply tube. Might this be the mystery connection?

Attachments:

firewall holes (speedo cable).jpg (filesize: 157.92 KB)

engine near side by firewall (with mystery plug).jpg (filesize: 172.30 KB)

engine rear under firewall.jpg (filesize: 164.03 KB)

engine rear off side (with mystery connector).jpg (filesize: 154.65 KB)

Re: Smiths rev counter drive off of Rotax AT146 dynamo?

Written by Adrian at Apr 19, 2019 11:32 am

On our later M45 the mystery fitting isn't present and our drive is located in the round plug shown in your picture.

Here's a pic of ours whilst on a dyno after the rebuild
