

Untitled

Roger Moss

Joined: 31 May 2004

Posts: 369

Location: Leicester UK

Posted: Sun May 11, 2008 10:23 am Post subject: Scott racer development progress

In 2007 we had shortened the tank and re positioned the seat to tidy up the bike with the amended weight distribution. Unfortunately this meant further adverse reshaping of the exhaust system to suit the frame changes. This reduced the power noticeably from a normal best BHP of about 35 to about 32.5. I felt embarrassed to see Paul Dobbs riding like a hero but having to usually settle for second place. I needed to make a new cylinder head and commission a resonant exhaust system. These are both costly undertakings, both in terms of money and of time that would otherwise be used to earn a living.

I received support from three private individuals with infinite gratitude and this has enabled this work to be done, with a little over towards racing expenses. In addition to entries, as you will all be painfully aware, travelling and race fuel alone can be significant, whilst tyres are £100 each and last two meetings only. When the job was completed, I then found that previous pre plating erosion had exposed a minute passage from a block holding down hole to the side wall of a transfer port. This was admitting water into the crank chamber and thus into the mixture for burning. A great disappointment. I stripped it all and having dried and degreased the water jacket of the block, I encapsulated the suspect areas with slow set epoxy resin. Finally it was all together again. Given that the tuning was getting "near the edge" I decided to ask Dave Holmes to help set it up on his dyno. I do like working with true professionals where an incorrect action could cause damage that would be expensive and lengthy to repair. I knew we had about 32 bhp last year and we had previously recorded a best figure of 35.4bhp. I was hoping to make 37 bhp of perhaps a shade better. The first run made 41.9bhp. I tell you honestly, I could have wept for joy! We varied jetting, timing and air trumpet lengths whilst monitoring plug condition and fuel flow against power. We decided to slightly err on the rich side and go about 1.5 degrees more advanced than the optimum. This gives 41.1 bhp which by calculation will give about 115 mph naked rider prone and if we put the streamline fairing on about 132 mph for a flying kilo. It had always been a secret dream to see a Scott better the much vaunted 126 mph of the Vincent, albeit with a fairing, so this is within reach. Dave Holmes was very impressed and I have all the graphs and data, plus a video clip of the bike on the dyno. He said he thought it would be possible to get 50 bhp with further development and to give a comparison, he said that a G50 in standard condition would give 41bhp on his dyno, although it could then be tuned to get 50 bhp with some work.

I am 67 and these are interesting speculations, but out of reach for me. I do accept that the bike has a much more narrow power band, coming "On the pipe" at 3300 rpm and dropping off at about 5700 rpm. There is power below these figures, but the torque curve is not as flat as it was. The bike was built to win races and attract public attention to Scotts. In the past few years, it has been quite successful and it has encouraged a significant number to consider having a Scott. This year is definitely the last year that Paul Dobbs will be returning from his native New Zealand to race in the UK, so I want to make the best of it. I had hoped to take Marina on holiday to Denmark and Holland in the camper, but I have cancelled this to help fund the race meetings. Subject to it all hanging together, it is racing and I have no spares on the shelf, we are planning that Paul rides it at Mallory June 22, Anglesey August 8 & 9, Lydden 30 & 31 August. I will participate at the Beezumh at Cadwell on August 15 & 16 (Wow, August will be busy, I must be good to Marina!) and Cadwell Sept 27 & 28.

If everything is still OK for Cadwell, I would consider riding one day only and offering a ride to Bill Swallow for the other day. Bill's father Ken Swallow was a Scott dealer for years in Golcar and Bill was brought up with them. He wanted to do the test some years back at Lydden, but Mortons decreed that Mike Powell did all two stroke tests. Bill has asked if he could have a ride some day, as have several other leading riders, but I think their family dedication to Scotts

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is a special consideration.

For the technical and to illustrate why I was cautious. Head volume is 19cc, bump clearance is 0.030" static. Capacity about 650cc and pistons are home made from castings. Before the test, I felt anxiety, then I felt euphoria. Now I am nervous about the continued health of my mechanical child. Pass the Valium!
Kindest Regards to all and again, heartfelt thanks to those who helped make it possible. Roger

Rebuilding and upgrading of Scott and Silk power and transmission units. New enhanced replica Scott engines. Special manufacture Scott technical info at our website www.mossengineering.co.uk

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efr215

Joined: 06 Nov 2004

Posts: 216

Location: Leigh-on-sea, Essex

Posted: Sun May 11, 2008 12:44 pm Post subject:

No moss on Moss what!

Really excellent news Rodger, very well done, 'aint it nice when it all comes together, like as dog with two tails eh?

Mark you, I too am 67 and I personally avoid mirrors so the prospect of a "115 mph naked " Roger (have you no shame!) Moss doing over the ton the Scott will certainly attract some sort of attention!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

I 'spose we should at least be thankful you'll be prone! Te! He!

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Sun May 11, 2008 4:59 pm Post subject:

All sound excellent Roger! Am very curious to see what it will do on track. Sorry though ypu had to cancel the trip to Denmark/Holland.. Marina must be a very understandable wife!

Good luck with the races, I will follow it closely! And I am very curious for the Dyno video, hope you get it online soon!

Kindest regards,
Erik

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jfcid

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Joined: 31 May 2004

Posts: 23

Location: Madrid-Spain

Posted: Mon May 12, 2008 8:52 pm Post subject: congratulations

Hi all,

Congratulations for the very good achievement! Really good news!

Just a comment about you encouraging others to be interested for Scotts, let me say that it wouldnt be the first time that one of my mates from Spain and Portugal shows me the front page of VMCC's magazine where the picture of your bike appears! I have to say that I then feel proud to be one of the Scott's owners club member...

I have only left to say that I hope you have a really good time in the last racings you are planning, and we will be expecting your news!

Kind regards,
Juan Felix Cid