

Untitled

Roger Hulett

Joined: 31 May 2004

Posts: 140

Location: South West France

Posted: Fri May 16, 2008 4:08 pm Post subject: 25years on.

I bought this Scott in Feb 1983.from Roy Walton (don't know if he is still a member) it has languished in the shed ever since. Towards the end of 2007 i started rebuilding it. TODAY it is finished (sort of). I wheeled it out of the garage, gave it a couple of squirts of petrol down the carb,two or three kicks and it started. South west France disappeared under a cloud of smoke,but once the oil pump was adjusted that soon cleared. HOWEVER, after about four or five minutes the rad boiled dry !!! and the exhaust pipe was almost red hot !!! After it cooled down I refilled the radiator,started it and the same thing happened. Why was this ? It started easily and ran reasonably well there was adequate oil and the petrol was dosed with Redex lead substitute. Any clues ????? Thankyou Roger Hulett

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BRIAN MARSHALL

Joined: 31 May 2004

Posts: 77

Location: East Midlands, U.K.

Posted: Fri May 16, 2008 6:50 pm Post subject:

Hi Roger.

For it to run as hot as that the only thing I can think of is that the years of slumber have caused a load of sediment to collect in the cooling system, preventing the normal thermosyphon circulation, so give it a good flush out with both clean water and a dose of suitable laxative such as RADFLUSH. I would also check that the timing is not severely retarded as that can cause VERY hot running.

Regards. Brian Marshall

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BRIAN MARSHALL

Joined: 31 May 2004

Posts: 77

Location: East Midlands, U.K.

Posted: Fri May 16, 2008 6:57 pm Post subject:

Hello again. Just noticed my typo.....I meant "retarded"! .Another second thought is Forget the Redex lead substitute. No two-stroke should need it. Cheers. BM.

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Roger Hulett

Joined: 31 May 2004

Posts: 140

Location: South West France

Posted: Sat May 17, 2008 10:30 am Post subject:

The problems continue. By advancing the ignition the overheating has ceased. However, although it starts very easily, it is now only running (albeit very well) on one cylinder. I have changed the transfer port gaskets, changed the crankcase door gasket. Swapped the plugs over. Swapped the plug leads over. Attached another plug to the plug lead (scintillating spark), what else can I do or check ??? So near and yet so far !!!

Roger Hulett

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Roger Hulett

Joined: 31 May 2004

Posts: 140

Location: South West France

Posted: Sat May 17, 2008 10:32 am Post subject:

Hi Brian. Your comment re additives was interesting. Can we use normal unleaded pump fuel in Scotts ???

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BRIAN MARSHALL

Joined: 31 May 2004

Posts: 77

Location: East Midlands, U.K.

Posted: Sat May 17, 2008 3:43 pm Post subject:

Hi Roger.

Yes, your Scott should be perfectly happy on unleaded petrol. As you seem to have licked the overheating by advancing the timing but are only firing on one cylinder, the next thing to test is the crankcase compression. Take out both spark plugs, and earth both plug leads to protect the magneto. With the petrol turned off and the throttle wide open turn the back wheel slowly with the bike in 2nd or 3rd gear. As you turn the engine over you should hear a loud "plop" twice per complete engine revolution if all is well "down below". I suspect you will only get one Plop per revolution, in which case one of your cylinder base ring gaskets has probably blown. Another but unlikely possibility is that one of the glands is not seating properly. This can be tested without dismantling by filling the suspect crankcase side with some oily paraffin (kerosene). If the gland is not sealing properly the paraffin will leak out adjacent to the flywheel sprocket(s). Good Luck!

Regards and best wishes. Brian.

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chstorm

Joined: 02 Aug 2004

Posts: 88

Location: Oslo, Norway

Posted: Sat May 17, 2008 6:53 pm Post subject:

Hi Roger,

One more possible cause - based on experience:

Magneto trouble - take off the lid covering the contact breaker mechanism. Start the engine (if possible) watching the contact breaker points. If you see fireworks - blue-green sparks from the points, you may assume two possible causes - lets's take the easiest one first:

1. One of the platinum points (the tip of the contact breaker) has fallen off. This will cause current loss in the primary windings of the armature, and you may lose spark on one cylinder or both. The fact that you advanced the ignition may have worsened the condition if the spark no longer occurs close to the maximum flux position of the armature. Solution: New contact breaker.
2. Weak, faulty condenser - in which case the magneto has to be properly overhauled and tested.

Even if there are no excessive sparks from the points, the magneto may be the cause of trouble. If there are short circuits in the secondary windings of the armature or the magneto needs to be remagnetised, a weak spark will occur at the spark plug.

In my experience, magneto trouble is at the root of all sorts of strange behaviour from otherwise healthy engines. However, I agree with Brian that the symptoms described may very well be caused by loss of crankcase compression.

Kind regards with my best wishes,

Carl

Carl Henrik Stormer
Oslo, Norway
Scott TT Replica 1930
Scott DPY Flying Squirrel 1936
Scott DPZ Flying Squirrel 1938
Brum Scott Flying Squirrel 1958

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Roger Hulett

Joined: 31 May 2004

Posts: 140

Location: South West France

Posted: Sun May 18, 2008 1:59 pm Post subject:

Thanks everyone, the diagnoses were spot on. The "plop plop" was fine, so I changed the points, now it fires on two. Although I can't get a nice tickover like some of the bikes I saw at Abbotsholme. It runs "lumpily" with the occasional misfire. What should I check next? I am using petrol with a lead

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additive, and it is 95, could this be a problem?
Thankyou Roger Hulett

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chstorm

Joined: 02 Aug 2004

Posts: 88

Location: Oslo, Norway

Posted: Sun May 18, 2008 3:16 pm Post subject:

Dear Roger,

I am glad that you solved your problem.

There is nothing wrong with 95 octane petrol - the bike will even run nicely on 92, 86 or 76. The lead additive is unnecessary but will do no harm. It is difficult to get a perfect tickover on a Scott. The carburettor has to be in a very good condition. The engine has to be warmed up properly. After this is done, you may first adjust the tickover speed. Next you adjust the idle jet - first inwards (clockwise) - slowly - a little at the time until the engine slows down, misfires or lets out unhealthy sounds or smoke. Thereafter turn it slowly - a little at the time - outwards (anti-clockwise) until the engine misfires again or begins to run unevenly - then turn it back down (clockwise) a little bit until it runs evenly again. If you adjust the tickover speed after this, you may have to readjust the idle speed jet once more. Do not adjust for a fast tickover if possible - it will lead to problems with a "hunting" engine going downhill when the throttle is off.

"Belt and Braces":

Until you are sure that your oil pump is working perfectly, you may mix some 2-stroke oil in the petrol - 2% is enough - 2 decilitres per 10 litres petrol. Any 2-stroke oil will do, but the modern self-mixing variety is the easiest to use, albeit ridiculously expensive when bought in small bottles.

Good luck!

Kind regards