Wilfried

Joined: 29 Aug 2004

Posts: 7

Location: Austria, near Lake Constanze

Posted: Wed Oct 10, 2007 12:49 pm Post subject: 1929 Amal carb on 1914 Scott

Hello

I use an Amal 1929 brass carb (Scott) on my 1914 Scott. Throttle slide is the one with the very small cutout, needle in highest position. Main jet seems to be ok at nearly full throttle. Air screw 1/4 open.

Problem is the coughing when going from idle to about 1/8 open. If needle is in a lower position the mixture is better for acceleration but the coughing at the beginning is then awful. Juggling with air slide helps a little bit but is very unconvenient.

What about making the jet called N bigger? N is the small jet hole just befor the inner end of the sleeve in the body, next hole - outside the sleeve is the idle jet hole.

Any other suggestions?

Other carb?

Thank you and kind regards

Wilfried

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efr215

Joined: 06 Nov 2004

Posts: 215

Location: Leigh-on-sea, Essex

Posted: Wed Oct 10, 2007 4:11 pm Post subject:

I have to admit that I have never had dealings with an Amal of this particular age so I'm guessing a bit. Assuming they follow the usual Amal way of working I think you will find that it is the size of the cutaway on the slide that controls the mixture for the first 1/4 or so of the slide opening, if you have too small a cutaway then the mixture will be over rich which would explain the coughing. The needle controls mixture at 1/4 - 3/4 opening but there is a good degree of overlap. Having the needle in the top groove also seems a bit odd as that too will make for a rich mixture. Is the slide badly worn perchance?

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Wilfried

Joined: 29 Aug 2004

Posts: 7

Location: Austria, near Lake Constanze

Untitled

Posted: Wed Oct 10, 2007 8:10 pm Post subject:

Thank you for your answer

efr215 wrote:

the size of the cutaway on the slide that controls the mixture for the first 1/4 or so of the slide opening, if you have too small a cutaway then the mixture will be over rich which would explain the coughing.

I identified the coughing as the mixture beeing too weak

efr215 wrote:

Having the needle in the top groove also seems a bit odd as that too will make

Sorry highest position means needle in bottom groove which makes a rich mixture at intermediate

efr215 wrote:

Is the slide badly worn perchance?

No it is in very good shape

My feeling is that the mixture is ok in idle

too weak at intermediate between idle and accelaration (if I lift the throttle and keep the air lever a little bit down it works fine)

a little bit too rich at accelaration

and ok at full throttle

I read on another topic in this forum that 3-jet Binks carb is working fine on another Veteran Scott. But this is probably another unobtainium piece.

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands Posted: Thu Oct 11, 2007 6:25 am

Post subject:

I guess your bike would be fitted with a Scott carb originally (?!?). Later on they used Binks (2 jet and 3 jet). My 1923 Scott has a 2 jet Binks carb. This works quite good throughout the rev range.

I have heard form a guy that swapped the internals of a Binks 2 jet for those of a Amal 276. That way you would get a needle carb in a needleless carbs body. I will look into that this winter, just out of curiousity.

So you see, quite some possiblities! And yes, you will not find a suitable Binks on every streetcorner...

It seems you will have to use air and throttle for an optimum result. Just like it was done in the old days I guess...

Untitled |

I had similar problems on my 27 Flyer, more info in this posting

Might help a bit but I guess you already searched the forum. And in my posting I did not find a real solution either. I do not remember how or when but somehow my Flyer ran fine afterwards.

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Ian Parsons

Joined: 10 Jun 2004

Posts: 64

Location: Northamptonshire

Posted: Thu Oct 11, 2007 7:41 am Post subject:

According to my Amal notes: Up to 1/8 throttle opening is controlled by the pilot jet.

1/8 - 1/4 is throttle cut-away 1/4 - 3/4 is needle position 3/4 - Full open is main jet size

Spitting back through the carb is definite sign of weakness. If the engine spits back on opening the throttle from tickover then the pilot mixture is too weak. Apart from carburettor settings the condition of the carburettor and any other air leaks will have a major imact at this range. At higher engine speeds the effects of air leaks are less and may have been adjusted out by altering the other carburettor settings.

The fixing of the inlet stub is not very clever on early Scotts as it relies on a clamp from the frame. Scotts also fitted gauzes on the transfer ports to eliminate spitting back but this will affect engine power. I don't think anyone uses them now.

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Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands Posted: Thu Oct 11, 2007 9:05 am

Post subject:

Ian Parsons wrote:

The fixing of the inlet stub is not very clever on early Scotts as it relies on a clamp from the frame. Scotts also fitted gauzes on the transfer ports to eliminate spitting back but this will affect engine power. I don't think anyone uses them now.

You are right here. I have altererd the clamping a bit. See image. It might be worth a check!

Untitled My air leaks (and weak running) were a lot less after this mod. Erik