

Untitled

Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Tue Aug 21, 2007 8:28 am Post subject: How to operate a two speed Scott

Hey all,

Well, yesterday Mr. Chas Mortimer (yes, the former motorcycle racer!) delivered my two speeder. It is a very nice bike and I am quite pleased.

But now I am facing all sorts of new things. I hope you guys can enlighten me...

The carb: The bike is fitted with a Binks carb. On the float chamber I do not see a tickler. Shouldn't there be one on the top of the lid? It looks like I am looking at the point of the needle from above.

Oiling: On the oil tank there is one pump and two drippers. On the pump: I saw I can unscrew the plunger and then move it up and down. There also is a tap below the pump in the oil line. I have read I should give the pump a full squeeze every 25 miles.

The drippers: I guess I have to turn those open every time I go for a ride. Leaving them open will cause the oil to keep on running. But how far should these be opened? Should there always be a certain level of oil on the sight glasses (eg half filled) or should there be no oil standing at all?

Gear change: The gear pedal is very loose. I do not know this should be the case. I guess I can adjust that by tightening the screw on the strap that is around the drum?

I am sure I will have some more questions in the future..

Cheers,
Erik

[Back to top](#)

Martin Heckscher

Joined: 01 Jun 2004

Posts: 20

Posted: Tue Aug 21, 2007 6:21 pm Post subject:

Hi Erik,

I know nothing about 2 speeders, but I can tell you that when your Binks float chamber fills with petrol, the tickler will rise with the fuel level and end up

Untitled

exactly where you think it should be now!
Sorry to read about your problems with the other bike.
Best wishes
Martin

Back to top

dave bushell

Joined: 09 Jun 2004

Posts: 231

Location: Caterham, Surrey

Posted: Tue Aug 21, 2007 7:45 pm Post subject: how to operate a two speed
Scott

Hi Erik

Adjust the two drippers to dispense oil at the same rate as you would for a pilgrim pump. The central plunger pump supplies oil to the two speed gear. You can stiffen the operation of the gear pedal by tightening the clamp ring around the casing adjacent to the pedal, (This is assuming that gear change is not worn out). The clamp should be tight enough for you to need to hold the pedal down for the low gear, but when you tap it into high gear it should stay there without your foot on the pedal.

Dave

Back to top

Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Wed Aug 22, 2007 6:48 am Post subject:

Martin Heckscher wrote:

Hi Erik,

I know nothing about 2 speeders, but I can tell you that when your Binks float chamber fills with petrol, the tickler will rise with the fuel level and end up exactly where you think it should be now!

Thanks Martin, I figured that one out yesterday when I unscrewed the float chamber cap...

@ Dave: the problem is I do not have any experience with a pilgrim as my other Scott has a modern Japanese pump on it... So, if you could tell me a bit more I would be most grateful!

I tried the plunger pump. Unscrewed it a bit and then moved it up and down. There was no pumping action whatsoever... I guess I have to take it to pieces.

Another question: The bike is fitted with a Thomson & Bennet magneto. When I bought the bike I knew that the controls for the advance/retard mechanism were missing.

I would like to fit some. On the BTH of my Flyer there is a spring giving

Untitled

counterpressure to the turning camring. On the T&B there is no spring. How is the adv/ret operated on this magneto? By a solid cable perhaps? Or is there a spring fitted between the rotating arm and the stud for the cable adjuster?

Erik

[Back to top](#)

dave bushell

Joined: 09 Jun 2004

Posts: 231

Location: Caterham, Surrey

Posted: Wed Aug 22, 2007 5:29 pm Post subject:

Hi Erik

As your engine is not new, I suggest 20 - 25 drops per minute on each dripper. Remember, that apart from gravity, the drippers also depend on engine suction, so you will need to make sure that there are no air leaks in the system and that you make sure that there is oil in the crankcase sumps during the initial start-up period. Note the position of the adjusting dials and when you find a position that gives a slight blue smoke haze when running, position the pointers on the dials to enable you to set them every time you use the bike. You will need to turn the drippers off when not running the engine to avoid flooding the drippers with oil.

Don't know much about Thompson Bennet magnetos, but there is usually a spring somewhere that returns the slip-ring to the fully retarded position when the ignition lever is closed. Have you cut the wire that is holding the mag fully advanced in the photograph? If it doesn't move to the retarded position, you could fit a convoluted spring between the two arms.

[Back to top](#)

Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Wed Aug 22, 2007 7:30 pm Post subject:

Thanks Dave, this helps!

The magneto does not have any spring in it and I do not see any place where there should be one. So I guess I will have to fit a spring myself.

Thanks,
Erik

[Back to top](#)

malcwebb

Untitled

Joined: 31 May 2004
Posts: 16

Posted: Thu Aug 23, 2007 5:52 pm Post subject:

Erik

From what I've seen on other vintage bikes, the original spring on the mag would be a volute spring - one of those made out of a coil of flat sheet spring metal which tapers towards each end. When you compress them it squashes into a cylinder. The only time you see them on later bikes is on exhaust lifter cables.

Malcolm

[Back to top](#)

Erik

Joined: 10 May 2005
Posts: 410
Location: Moerdijk, The Netherlands
Posted: Fri Aug 24, 2007 10:49 am Post subject:

Thanks Malcolm. There is a large autojumble in Holland this weekend and I am pretty sure I will be able to find such a spring there.

And otherwise I will just butcher one of these.....

Cheers,
Erik

[Back to top](#)

malcwebb

Joined: 31 May 2004
Posts: 16

Posted: Sat Aug 25, 2007 2:13 pm Post subject:

Erik

That's the one, they were also used on Ariel valve-lifter cables right up to the end of the singles circa 1959.

It's too hot in the workshop at the moment, so I was casually ambling through the Internet for a break when I realised that nobody has pointed you in the right direction on your pump. I am not a 2 speed expert, but this device looks identical in many details to the Best and Lloyd plunger pumps used on an number of early bikes. The idea is that you release the catch on the plunger, and it should rise (by spring power), you then push it all the way down which pressurises the system. You can adjust both sight glasses for number of drips. The plunger slowly rises as the oil goes out until you have to push it down

Untitled

again. I know from experience, that these suffer air leakage on the main barrel washer (a big cup one) and the packings at the various glands.
I can't post you a diagram on this site because I don't have the copyright on it, but something might just arrive by private E-Mail. Hope this helps.
Malcolm

Back to top

dave bushell

Joined: 09 Jun 2004

Posts: 231

Location: Caterham, Surrey

Posted: Sat Aug 25, 2007 3:12 pm Post subject:

Hi Erik

I'm afraid Malcolm is wrong concerning his comment regarding the pump. This pump is only for lubricating the two-speed gear and has nothing what-so-ever to do with the drippers. On earlier Scotts, there was no pump for the two-speed gear lubrication, just an on/off tap.

He is right in that it does pressurise the drippers on some other makes of vintage and veteran bikes.

Dave

Back to top

malcwebb

Joined: 31 May 2004

Posts: 16

Posted: Sat Aug 25, 2007 11:33 pm Post subject:

Sorry chaps

As I said, I'm no two-speed expert, I bow to your expertise. On the two (non-Scott) bikes I have with the pressure-type pumps, they are mounted at the top of the tank so there is no head of oil for them to function as drippers, I can see now how the 2 speeder differs. I take it these devices were made by Best and Lloyd though?

Hopefully the diagram will still help with location of washers and packings which normally need sorting if the bike has stood for any length of time.

Cheers

Malcolm

Back to top

Erik

Joined: 10 May 2005

Posts: 410

Location: Moerdijk, The Netherlands

Posted: Mon Aug 27, 2007 7:06 am Post subject:

Untitled

Hey guys,

Last weekend I started the two speeder up for the first time. After a few kicks (a few more than needed as the kickstarter slips) she fired up with a euforic yowl! And put a smile from ear to ear on my face!

The first few times up and down the road was quite an experience... not being used to two speed gear, LH heel brake, manette controlled throttle and air etc. etc. I already boldly entered the Scott in track sessions on Sept. 8-9 so I better get used to it soon!

Tomorrow I will go to the Dutch registration office to try and get it registred. I hope the sound is no show stopper there (although not so loud as I expected).

On question on the pump. In between I have got it working (the plunger got unscrewed from the leather washers). Malcolm talks of the pump rising due to spring power. My pump has no spring in it at all.

My question is: should there be one on a two speed Scott?

Cheers,
Erik

[Back to top](#)

Erik

Joined: 10 May 2005
Posts: 410
Location: Moerdijk, The Netherlands
Posted: Tue Aug 28, 2007 9:00 am Post subject: HURRAY

HURRAY!!

The bike just got approved! The did not even check the sound at all! Should have the papers by the end of the week so I have exactly one week to get used to the bike before my first track sessions on it...

Cheers,

A happy Erik

[Back to top](#)

Erik

Joined: 10 May 2005
Posts: 410
Location: Moerdijk, The Netherlands
Posted: wed Aug 29, 2007 7:16 am Post subject:

Untitled

On my website I have added some short video clips of my first ride on the little two speeder. This is one:

video

The rest on my site under "pictures"

Cheers,
Erik