3 Speed Flyer Gearbox Undertray Brackets

paulw

Joined: 31 May 2004

Posts: 5

Location: South Africa

Posted: Wed May 02, 2007 9:51 pm Post subject: 3 speed Flyer Gearbox

Undertray Brackets

On a number of my Vintage 3 speed flyers the bronze?rear undertray bolt bracket which appears to have been assembled loose onto the lower frame rail has broken.Can anyone advance a reason as to why these were bronze/why they were a slinding fit on the frame and not a welded lug? and finally what an appropriate remedy would be.Brazing a lug onto the frame, making up a split bracket or cutting a frame tube out replacing the bracket and re welding the tube.The split bracket seems the best!

Regards

Paul Whitehead

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Roger Moss

Joined: 31 May 2004

Posts: 268

Location: Leicester UK

Posted: Wed May 02, 2007 11:05 pm Post subject: Rear undertray securing

bracket

Hi Paul. On the 1928 bike I had, there was the arrangement you describe. I have learned that to expect perfect logic on everything you find on a Scott is to expect too much. The were designed and made by human beings not gods. The bronze clip arrangement would enable them to open out the clip and push it over the tube, then close it up again without breaking. You could perhaps do this another twice before the process weakened it to the point of it fracturing. More likely breakages are caused by over tightening. Why did they design this item in this way? It would allow them to slide the bracket to line up with the undertray holes, in case there was a variation in the centre distance. Another possibility comes to mind, but this is just a guess. I remember there are models with a long undertray and others with a short undertray. If they used the same frame, then an undertray rear bracket that could be easily adjusted to cope with either would seem sensible. One thing I

have noticed with Scotts, is that once they designed something for a reason that existed at the time, then in later years when the reason no longer existed, they still kept on with the same routine. The three hole carb mounting is a well known case in point.

As regards a replacement, A split clamp is the obvious answer. One suggestion before you make it. If you leave 1/8" space between the split bracket and the undertray on the chain side, you can easily make a snail cam that when rotated comes against the rear edge of the outrigger bracket. When you tighten the bolt to clamp the bracket to the undertray, you clamp the snail cam and this prevents it rotating out of contact. By this way you have solved the Scott 3 speed tendency to pull the outrigger to the rear, lose power through friction in the gearbox bronze output bush and associated rapid wear of this item. Hope this helps

Kind Regards 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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Kind Regards Roger