

Colin Hough

Joined: 10 Sep 2004

Posts: 35

Location: Amersham, Bucks

Posted: Fri Aug 25, 2006 4:13 pm Post subject: Brum Oil Tank Removal

Not sure how easy these comments will be to follow and they probably can only be understood by a Brum owner.

Having to remove the engine and gearbox of my 1959 Brum, I reached the conclusion that I needed to remove the oil tank (if anyone can tell me how to lift them out without doing this, I would be very interested in knowing how).

However, after removing the petrol tank, I could not roll the oil tank forward as it clashed with the petrol tank fixing bracket. So, the only answer is to take it out sideways (towards the left as the gear change stops it going out the other way). However, this is not possible with the oil supply line tap in place (it comes out from under the front right hand side of the tank). To undue the tap was very problematic as clearances are minimal - I had to juggle the tank around (after removing the nut of the engine bolt next to it) to be able to position the oil tap so that I could turn it (even then I had to open and close the tap at different points of each rotation). Am I missing something obvious here???

When I come to put it back, the tap lever has to be in exactly the right position, which means that it is not possible to keep turning until it is tight within, say, +/- a quarter of a turn of the ideal position (i.e. the tap must be positioned to +/- 0 which means it may not be fully tight). So, a second question: how do you make sure it finishes up in the right position and oil tight?

Looking at some photos of Jim Best's machine I took last year, I notice that his oil tank has an outlet that comes out facing forward from just above the bottom of the oil tank. This then makes the valve very easy to remove and it has some tolerance as to where it finishes up after tightenting. Is this a later standard for Brum machines or a one-off. If common in later machines, does anyone have a tank I could buy as I am not looking forward to trying to re-assemble the oil tank and oil supply line.

All comments appreciated.

Note: I will be at the Gathering, alas without the bike (especially as it is a big year for Brum machines), and will be looking to discuss this with all the Brum owners that are there.

Colin

Colin Hough
1959 Brum
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dave bushell

Joined: 09 Jun 2004

Posts: 112

Location: Caterham, Surrey

Posted: Fri Aug 25, 2006 9:22 pm Post subject: Brum oil tank removal

Colin

Originally, the oil tanks were not fitted with a tap and many owners fitted one to prevent the pigrim pump filling up with oil - especially when the pumps became worn. I fitted a tap to mine - a 1957 Brum. Some owners blanked off the original outlet and made a new one to the front, a much more sensible position. You may like to consider doing this yourself, but it will probably mean that you will have to repaint the tank after a new ferrule is soldered in.

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Richard Moss

Joined: 12 Nov 2004

Posts: 43

Posted: Sat Aug 26, 2006 10:04 am Post subject: oil tap

Hi Colin,

I just had a company stamp me out some fibre washers of different thicknesses for this very situation, though for the alignment of the main bearing oil connections on the crankcase. These are 1/8" BSP so depending on the size of your oil tap i can either help you with a selection of 6 thicknesses between 0.8 and 2 mm or i can give you the details of the company so you can get some stamped out to the size you need (though with a minimum order of £18 youll be getting a few made!)

Good luck with the tank removal!

Richard
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efr215

Joined: 06 Nov 2004

Posts: 80

Posted: Sat Aug 26, 2006 7:22 pm Post subject:

If there were enough room I'd be thinking of a nipple in the tank and a loose nut on the tap which would/should make fitting/re-fitting easier. That would probably mean changing or modifying the tap but it sounds as if there isn't the space available even if it would at least avoid a repaint.

Or:

The pitch of a ?' BSP thread is 0.036" this means that each 0.010" of washer thickness represents 10 degrees of tap rotation.

If the tap is screwed back into the oil tank until almost home and the resulting gap carefully measured it should not be too difficult to find some soft sheet material, copper or aluminium say, that is a bit thicker to make a washer from.

Sheet materials:

Brum Oil.txt

20swg = 0.036"

22swg = 0.028"

15mm copper water pipe has ± 0.030 " wall thickness

22mm has a wall thickness of ± 0.040 "

Who hasn't some odd ends of water pipe lying about?

So split, anneal and flattened out and there is your material.

BSP threads are usually made to a pretty loose tolerance and will accommodate a little overtightening, if it come up a bit loose there is always a smear of "Plastic Gasket" or treat the metal washer as a spacer and cut a couple of paper washers of a suitable thickness to go either side.

Or:

Cultivate someone who owns a lathe...