

# *Reliant Kitten Register*

**MEWSLETTER Thirty-Five**

**July/August 2000**



*The Register caters for all the under 1 litre Reliant 4-wheeled vehicles plus all of their derivatives – Rebels, Foxes, Tempests, Salamanders, Ciphers, Jimps, Asquiths and all other specials including the Liege...*

Edited and distributed by Brian W Marshall, 16 Glendee Gardens, Renfrew, PA4 0AL

**☎ 0141 886 6117      Fax 0141 561 5430**

## The Reliant Kitten Register

### MEWSLETTER No. 35

The following individuals have kindly agreed to give and receive information on the following topics on our behalf:

Rebel alternative parts *contact Brian*

Kitten alternative parts *contact Brian*

Fox alternative parts *contact: contact Brian*

Our Mutual Aid Spares scheme *contact Brian*

Mewsletter pictures *contact Brian*

This time we have decided to use a standard, original Kitten for our front cover picture. The car in question is unique in that it is the first one, I think, to have appeared on our front covers twice! This is John Pearce's very original Kitten saloon. If you can have good eyesight, I am sure that you will appreciate the effort that John went to to take this picture for us – is that your new garage John? John uses the Kitten as his daily transport, and covers a lot more miles in it in a year than I do in Moira's wee red car – I wonder if it's a colour thing?

The Register has a, now fairly old, web page at: - <http://www.uk-classic-cars.com/kitten.htm>

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It should be noted that opinions and ideas printed in this publication are as recommended by our readers, and do not necessarily have the approval of the Reliant Kitten Register. Owners must satisfy themselves as to the suitability of any suggestions made within these pages as no responsibility can be accepted.

Hello again and welcome, it came to my attention recently, that, in spite of all my years of experience, I sometimes still make fundamental assumptions, and in doing so leave people confused – and just why should you be any different from me? But seriously, the last few editions of the magazine have had a reference near the bottom of page three which said something like “ In this edition we have treated you to a ” with absolutely no reference to the fact that what I was talking about was the picture on the front cover! This omission was brought home to me over the past weeks, by the number of people who have, when talking to me, asked what the car on the front cover was. And here was I thinking that I had told everyone – oh well, I will try and make it clearer in future, and not fall into the trap of re-using bits of text from previous editions, and hence repeating mistakes. Just as I was beginning to believe that I had improved on the early editions where, because I did not know until the last minute what the cover picture would be, I would often refer to it in the following edition of the magazine. Still, in spite of such shortcomings, I really do believe that things are improving! (One has to have some beliefs to cling to in this life!)

Right, moving swiftly on, no more about computers in this edition, well not from me at any rate. Cars, that's the thing we all want to hear about. The wee red car is having a rest just now, she needs a new clutch, no I am not hard on clutches, the one in the Citroen has done over 146,000 miles now, a lot of that towing, and it still works fine. No the problem (I think) is that several of the diaphragm fingers have broken off, thus making it impossible to properly disengage the clutch --and it often makes the most horrendous noises when you try. ! I am really not up to changing a clutch these days. I never thought I'd have to face up to that admission, but there we are, and Jim Spence has kindly offered to replace it for me, indeed will have done so by the time you read this, thanks Jim. This couple of months out of service will of course help keep us within the 5,000 mile insurance policy mileage restriction, not to mention the delay in investing in another tax disc, so it is not all bad news.

The Wensleydale Railway Association get a mention (anyone out there know where we can acquire, at minimal cost, any permanent way tools, or indeed good condition bull headed rail?) not just because I am an enthusiast, but because I attended their A.G.M. in a Vantique, thank you John (Box), more on that story elsewhere. I guess I must have been a pretty unique individual that weekend, as I doubt if there were many people on the planet who could have claimed to have driven a Vantique over 400 miles in 4 days in early June, or any other month come to that!

I must confess that my plans of being able to take life easy in the latter half of the year, have been somewhat thwarted by two un-planned trips to England in July, one to a funeral in Southampton, and the other to bring my new car to Scotland from Suffolk. And a third one in July! All of this extra mileage and time spent away from home has, together with a bit of fatigue on my part, conspired to prevent me from responding to all the incoming mail as promptly as I ought. So, if you are one of those affected, my apologies, please bear with me – what I would like to think of as normal service, should be the order of the day by the time you read this.

### **REBEL ROUND UP**

You Rebel owners have gone quiet this summer – what's up? Too busy driving the cars to tell us about them? Yes yes, I will write the story of my trip from Suffolk to Renfrew, next time, honest. But I know that other Rebels have covered equally great, indeed greater mileages in shorter times recently, don't keep it a secret.

I must make mention of a couple of Rebels, the ones that took first and second prize at the Reliant Owners Club's National rally this year, well done Fred Heath and Mark Hayton, just what is it about Red Rebels? (One a saloon, the other an estate car) Any pictures chaps?

Just in passing, the old Rebel saloon that I mentioned in the last edition, has found a new home. John Johnstone, Jim Spence and I, helped Simon Chisholm to collect it and take it to its new home in Perthshire last Saturday. It needs an awful lot of work if it is ever to go again, but what with the original 600cc engine, it is very rare. Thanks for saving it Simon, and good luck.

Peter Hayton, our Fox alternative parts man, is one of those who was keen to set up a Rebel Web Site, and has been good enough to send me the following article for our

### FOXES' DEN



#### **The Lair of the Fox**

Apologies for not sending any words to the previous issue of the Mewsletter, pressures of work will get the blame

Our Fox, B322 BOV, is still not on the road, all I need to do is sort the timing out (yes, I can hear the shouts of Shame! Shame!). I will get round to sorting it sometime. I had inherited a Kitten towards the end of last year, with the previous owner letting me decide to break or repair. Unfortunately it was a break up job, with the body in a poor condition and the seat belt mounts completely rusted through. The Chassis and Suspension was beyond hope but the engine and gearbox will become spare for the Fox.

Various ancillary parts headed for brother Mark's Rebel. And then I received a phone call from Kitreg member Mick Lawton. He had intended to call Brian Millar (Kitten Alt Parts) and dialled me by mistake. Anyway, Mick was after details of a donor car for alternative seats for his Kitten. I am pleased to say that I was able to pass on the seats from the Kitten, which was partially dismantled at this time to Mick. Though he lives at Stoke on Trent, I was able to arrange with Telford ROC member Kerry Croxton to transport the seats to Telford so Mick could collect them from Kerry's home.

This brings me nicely to the Tandy Fox story. A Kitreg member recently asked about the availability of a Tandy Fox camper and by pure chance I heard of one for sale at a garage in the West Midlands and forwarded the details on.

A few days later another Tandy Fox was in a garage in Leeds. I never heard any more about these two until the middle of June when Kerry Croxton called me and said he had purchased a Tandy Fox from the West Midlands. Kerry is very much a Reliant person, with several models of Reliant. I hope he has joined the Kitreg by now and I hope Kerry has many years of enjoyment from his camper version of the Fox.

Another person to have recently obtained a Fox is David Myers, (Rebel Alt Parts). David and his wife had driven up to Gateshead to look at a Fox in the Reliant Dealers there, but had (quite rightly so) decided that it was overpriced for its condition. Then another had appeared for sale in Darlington at a very agreeable price, which he quickly snapped up. I have yet to see David's Fox, but I believe his wife is very attached to this newest member of the family.

Recently two people have asked about the window frames for the Fox doors. Of these one is a member, Dave Eyre in Barnsley. I can vaguely remember that there was some mention in previous Mewsletters about the frames, does any member know if there are any? and if so, where please? If not, is there

someone out there with templates or design specifications for the window frames. If there is enough demand I will try to find someone to make some up.

*Just a brief interruption, Duncan Bradford has the production of at least part of these in hand, and can, I believe, arrange to supply the stainless channel – Ed.*

Dave Eyre also enquires about installing a 5-speed gearbox, any suggestions of one that will fit with little or no modification? David is also after a set of side windows and a window for the rear door of his Fox. If any one can help please let me know and I will contact David with the details.

I do not have (as yet) any specific list of alternative parts for the Fox models, and if any reader has any information that they would like to pass on, please send it to me and I will start to compile a list of various components. The door hinges are from the older Mini's, and if the doors drop, ask your local Mini specialist for the Bush and Pin set, they are a lot (and I mean a LOT) cheaper than the complete hinge.

*Thanks for that Peter, keep it coming, Ed.*

### **One of Brian's trips south in 2000**

One day in May I happened to mention to John Box of Burton in Kendal near Carnforth, that I was planning calling in to see him on my way to Wensleydale the following month, en route to the Wensleydale Railway Association's A.G.M. John promptly offered me the use of the last Vantique for the weekend, subject to my being able to insure it. Sadly that proved to be a problem, as neither of my insurance companies would offer cover on a vehicle that was insured by someone else. So that put paid to that idea, or so I believed!

For those not in the know, the Vantique is a 4 wheeled Reliant based van, running on a Fox or Kitten chassis, with the Reliant 848cc engine and gearbox, it has a 1930's looking aluminium body with oval windows in the huge back door – it looks like two doors, but is in fact one large lifting tailgate, (which gives wonderful shelter when loading and unloading!).

When I arrived at Burton in Kendal on the 9<sup>th</sup> of June, John told me, that, subject to my date of birth and confirmation of my past good record on the insurance claim front, his insurance company were happy to put me on cover for a week. Well, that was a surprise I had not been expecting. So, unload the Citroen, load the Vantique, which came with a tank full of fuel, and, after a coffee and a blether, I was off, in the rain, to Preston under Scar (what a trip for the triple barrelled names!). The time was twenty past three, the weather dull and wet.

The Vantique has a really eager engine. The total recorded mileage was 1045 when I left the Box residence, but I knew that the speedo head was one of only a handful of parts on this vehicle that were not brand new! In fact the total mileage was under 100, the other 950 or so miles having already been recorded on the instrument in another vehicle! As a result of this I was keen to take it easy. However the pedal position in relation to the fairly high seating arrangement (great for seeing the countryside) made it very uncomfortable to cruise at less than 60 M.P.H., and I really wanted to be doing less than 50.

After a few miles of trying hard to keep the speed down, and failing miserably, I discovered that with the seat right back, I could cruise at 40 – 45 perfectly easily – thank goodness for that!



Driving the van was a delight, though it kept wanting to be driven faster round the corners than I really wanted to go!

The Vantique uses Reliant seats, which while perfectly comfortable, do not offer much lateral support, and so tend to discourage high speed cornering (in a three wheeler you are held fairly snugly in place, but the Vantique is a lot roomier).

Rounding a bend near Hawes, suddenly, out of the drizzle, there was a herd of cattle just standing on the road. It is a strange thing, but I often find that people, younger ones in particular, are not often impressed by the sound of a car horn these days, but the sound of screeching rubber usually works to great effect. Perhaps because of the water lubrication, the sound was not as impressive as it would have been on a dry road, but generally I think that cattle are brought up reading different books to the ones that we read. They are not in the least impressed by the noise of approaching traffic whose front wheels are not revolving! (Well, one of them at least).

I arrived at Preston under Scar where I was staying with Michael & Janet Bentley, and, after a bite to eat, we loaded the Vantique up with the goodies for the A.G.M. in Bedale on the Saturday.

The weather was bright and sunny on the Saturday, quite a contrast to the Friday afternoon. The meeting was well attended, and we had an enjoyable day back, via the shop in Leyburn to unload, and an early night.

The Sunday morning saw me off to visit friends at Hessay near York, on my way to Skellow near Doncaster, where I was collecting a 1955 700cc side valve Reliant engine. (For Simon Chisholm, who has an early Regal amongst his collection of Reliants)? It seemed quite appropriate to be collecting a 45 year old Reliant engine, in a virtually brand new Reliant based van!

I initially chose to avoid the A1, and took the A19 to get from Northallerton to York, stopping off at a Little Chef for coffee. I arrived at Hessay at 11:10. Back on the road again by twenty past one I decided to use the A1 from there on down, as the directions to the pick up address were from the A1. So off along the A59 to the A1, and on to Skellow.

I left there at three in the afternoon, and stopped off at Michaels garage, the Reliant dealer in Selby, to take a couple of pictures. They were of course closed, but I called in the following morning to see Dennis, the storeman. They were in fact quite familiar with the Vantique, it is the last of a total build of 12 such vehicles, and one of the others just happens to live near Selby, and has in the past been serviced at Michaels.

*I went on, via York, to spend the night with friends at Scoreby, near Gate Helmsley. After a pleasant evening catching up on things, (which, as such evenings tend to do, lasted till after midnight) and a good nights sleep,*

I was off again to Leyburn where I filled up the Vantiques tank, just about 40 m.p.g. not at all bad for that big body.

Then I had a trip to the rope works in Hawes to collect some racks for Michael, and took then to Preston under Scar. John & Jackie had kindly agreed to bring the Citroen over to me, and that saved me a bit of time the following day on my return trip to Renfrew. (Though the detour to visit the Box residence only adds about an hour to the journey time, by the time you have a coffee and a chat, it is actually 2 hours or more on to the day – a very pleasant couple of hours I might say, but extra time on the journey none the less) Unfortunately for them, I had left the Citroen's suspension set in the higher of

the two running positions, when unloading its contents into the Vantique on the Friday afternoon. So they did not get to experience the legendary Citroen ride at its best! Sorry folks!

Impressions of the Vantique, well, I'd really love to know just what it weighs. Also, I'd love to have that engine in my Kitten. I suspect that the van body, in spite of being aluminium, (a lot of it is double skinned), and it is high, and 7 inches longer than a Kitten or Fox, is really very heavy. It goes very well, but slows a lot on hills. It turned many heads, and was a very pleasant way to motor round the country for a few days. John's solution to the remote linkage required for the gearbox operation is a delight to use, every bit as good as Reliant's solution on the early Rebels. He assures me that he has not lightened the flywheel, but to drive it you are hard put to believe that, it revs so freely. It uses the Robin type of throttle operation, not the Kitten thing which gives you three quarters throttle with only a tiny movement of the pedal. Yet this engine really picks up with the slightest movement on the pedal. Yes, John really knows how to screw these little engines together properly. Obviously all the components being new does help.

Would I like it? – Yes of course, but the fact is that I currently have three vehicles on the road, as many others lying in lock-ups or friend's gardens, and neither the need, space nor finance to consider it, but it was great fun, and a very enjoyable experience, thank you John.

Now, if the Kitten Register had ten times as many subscribers, and I doubled the subscription, mobile advertising..... Well, one is allowed to dream is one not?

### **READERS LETTERS**

Dear Brian,

12<sup>th</sup> Aug. 2000

I would like to thank all 24 enthusiasts who took the trouble to send information on chassis / engine numbers as requested in the last Mewsletter.

Kitten and Fox owners responded best, but I still need information on Kittens from Nov.'79 on (SCD140 chassis numbers) and Fox pick-ups with a bulkhead.

The shrinking violets were the Rebel owners, only two replies, come on chaps, give us some input!

Simon Chisholm - Gilmerton

*Sorry about the response Simon, I must confess that I am one of the guilty majority, I will try and find time to do it, Ed.*

Dear Brian,

May 2000

You may remember my enthusiasm for setting up a web site. Now I know that it is a long-winded process getting it off the ground, but I believe it can be of benefit to subscribing members who are on-line. I must stress that the main objective of the website is to be a supplement to the magazine, and not a replacement, long may the magazine continue, and I appreciate the work you have put in over the years.

Some of my objectives for the web page are as follows: -



To have up to date news on the Club's activities. \* *See notes page Ed*

To be a basic reference point on the models covered by the club. This would enable potential members to find out more about the car, and hopefully join.

The information on the website would be pretty basic to start with, but with time more features could be added, such as vehicles for sale, top tips, and other useful information.

Articles that the magazine had no space for could appear online.

I could archive articles from all the past magazines (I can't believe I've just volunteered to do that!) *No, neither can I – Ed!!* This information would not necessarily be on the site, but available to members on request, either by e-mail or post.

Although you have mentioned in the past that there are a finite number of cars out there, I believe it would be beneficial to the Register and its members.

I would be more than willing to build and maintain the site as a service to members, and also an introduction to non-members. And I am sure it will be an education in itself of web programming which would be useful to me in the future.

Please consider the idea, I shall discuss it with you again. It might be an idea to put the concept forward in the magazine and see what members think.

Regards Richard (Plaxton)

*Thanks for that Richard; you will remember that I made reference to Richard's offer in the last edition. One question it does raise, in my mind at least, is just what is a Register? and what is the difference between such a thing and a conventional Car Club? – Is their such a thing as a conventional Car Club? I see the main difference as the absence of organised events. I know that not all Registers publish a magazine, but then again some Car Clubs don't either (so I believe).*

*As to the publication of articles that I do not have room for in the magazine, perhaps I have been misleading you, many of the letters that I receive are not intended as magazine articles, and others would need a bit of work. If you accept that I use the cream, I would have no wish for an official Register website to use inferior material.*

*As you will be aware from my comments in the past, there are a number of Reliant websites out there already, I am assuming that we are talking about an official dedicated Register website.*

*Anyway, I seem to remember saying earlier that I was not going to mention computers in this edition... So, if you approve of Richard's idea, tell him (who was it that said the art of leadership was delegation?)*

Dear Brian,

March 2000

Thanks for your time on the telephone earlier; this letter is just to confirm my request for an alloy rocker cover. I was pleased (and lucky) to find you in when I called, and the service was very fast. Well done. *Sadly not everyone had the same experience Les, I am just lucky not to have had the odd letter of complaint! Ed. But thanks anyway, I do sometimes get it right!*

Since I have the bit between my teeth now (new word processor – much too clever for my liking) can I mention a couple of points of concern. When my tax renewal came last February, I joyously anticipated a request for just £ 100. Instead they asked for the full amount (£ 155). On further investigation my car was quoted as having an engine capacity of 9,999cc, instead of the 848cc it has been since birth, and as is shown on all my documents. I contacted Swansea about it, but suspect that I will not know till my next renewal notice if they have made the correction. I solved the immediate problem of course, by using different forms. But I wonder what is going on out there, and if any other subscribers have encountered the same difficulty?

The second thing arose from the very interesting article about wheel balance and castor angle in a Mewsletter that has hidden itself away for now. (I am going to get everything properly organised soon – *When you do, will you let me know how please, Ed!*) My car has always suffered from a steering wheel vibration at 50 mph, and the article offered a possible solution. I checked other car values for castor angle, and the Reliant's at 12 degrees is very high. Most post war cars have values form 0 to 3 or 4 degrees. I tried altering mine but could not do much without serious modification. There seemed to be a slight improvement, but it was hard to tell. Then when tracking the wheels afterwards I chanced to look at the tyres and found that they were far from round. These were Goodyears from about 1989, and I was displeased to find that after about 100 years of making tyres they still could not get them round. I am now thinking that this could be the cause of my vibration.

Must get this off now, if I can get the printer to print it. Many thanks for all the work you do in running the Register and producing the magazine, it is appreciated.

Yours sincerely - Les Richmond - Looe, Cornwall.

*Thanks Les, the round tyre thing is a fairly common problem if a car has been left lying for a time. There really is benefit in the old technique of jacking the car up and reducing the tyre pressures to about 10 p.s.i. if the car is going to be laid up for more than a month or so. I know that Phil Hallam had to replace the 'new' - well they had 7mm of tread on them, - tyres on his Rebel when he first acquired it, as they had flats on them. It had been stood on flat tyres for years mind you.*

Dear Brian,

June 2000

I have just had my Fox C966 WJF repainted in the original Carmen Red in 'two pack' paint *the only way to do it if you want a lasting quality finish on a fibreglass body, Ed.* I am delighted with the results and would like to recommend Mr Gardner, Abbey gate Accident Repair Centre, 30, London Road, Wymondham Norfolk. Tel: - 01953 602288. The cost was between £ 700 – £800 for a full repaint, and they have their own fibreglass specialist. I have previously had a Midas Gold kitcar done by them with similar results. They are a major Ford dealership, but are happy to give every consideration to Kitcar and classic car enthusiasts.

Cheers, Paul Stevenson - Hethersett, Norfolk

*Thanks for the recommendation Paul, I know that some of our subscribers would be horrified at spending that much money on their car, but I also know that, depending on just how much preparation was required, that is an excellent price for a good quality respray these days.*

~~~~~

*Dick Goodall has written to me several times recently, and Dick, I will try and respond appropriately in the fullness of time, Dick is still struggling to find the correct anti-roll bar bushes for his Kitten, and we have spoken about this so often that I can't remember what size he needs.*

*One of Dick's points was his appreciation of our first attempt at a membership card. Thank you Dick. Those of you who received one with the last Mewsletter might have noticed that the Fox was omitted from the text on the back of the card, just a computer glitch – well it could have been my choice of font! My thanks to Brian Millar for taking care of the printing for me, and to Craig McCormick for the card.*

*Dick was asking if anyone knew if the old Farina bodied Austin A40 might have had a similar arrangement, though quite how easy it is to get spares for them these days I do not know (I didn't realise they even had an anti-roll bar!).*

*Oh, hang on, one of Dick's letters had the following tale: -*

Dear Brian.

June 2000

Things have progressed on the Anti-roll bar bush scene at last. So, 'Let me tell you a story Neddy', to quote Gritpype Thin of Goon Show fame....

*Better watch Dick, my spies tell me that certain factions in the factory are word perfect in all the Goon Show scripts!*

### **The strange story of PYB 262P and the Anti-Roll bar bushes**

(Weird musical intro, goonish laughter etc...)

Early this year PYB 262P went for an MOT test, which it duly failed. The only failure point was the state of the rubber anti roll bar bushes at the front, which were perished with enlarged holes. (Luckily there isn't any anti roll bar at the rear!) *Contrary to Dick's original interpretation of the MOT man's handwriting!! Ed.* In my innocence I thought that the getting and fitting of these small items would be easy.... Here is a short version of events thereafter.

Enquiries to the 2 Brian's' (Marshall and Millar) gained me the knowledge that 2 different diameters of anti roll bars have been fitted to Kittens. PYB has a 5/8" diameter one, while Brian Millar's beastie has a 3/4" dia one. Hmm, scope for confusion here! So, our Registrar kindly sent me 2 bushes, oh dear! They have a 1/2" hole. Far too small for a 5/8" bar. So I sent them back and got two more with a bigger hole, which turned out to be 11/16" dia, OOPS, now the hole is too big. Now what?

Someone suggested wrapping the anti-roll bar locally with black tape so as to make the 'big hole' bushes a good fit. O.K. let's try it. Well, it worked, but I was not really happy with the principle.

Time passed while domestic projects were tackled.

Last week I knocked myself back into gear and tried Graham Walker in Chester. Yes we have bushes and retaining clamps. So a day later I received a package including 2 bushes and two clamps *and I shall not quote the part numbers since they are the wrong ones. Ed!* Now I look at the bush description – REAR - these are for a Trikes rear anti-roll bar... Hmm. The hole is again 1/2" dia (or 12mm to those metricians amongst us) CURSES! Muttley, DO something! (per my namesake, Dick Dastardly). Again it seems that the correct bushes with the correct hole size 5/8" are not available.

Thinks... (WHY did I not do THAT before?) Could the holes be enlarged to a suitable size? I imagine that most of you know that rubber is not an easy material to machine, it deforms and accurate work is difficult *not if you put it in the freezer overnight first, Ed*. However the first essential is to hold the bush securely, so I took a bush, and clamped, and fastened them to a piece of dexion with two No. ¼" diameter bolts. Then clamped the dexion etc. to the bench vice. What could be used to enlarge the hole?

I strongly recommend the use of protective goggles from this point on.

A first attempt was made using a sharp drill bit for wood. This was no use at all. Little rubber was removed and the finish was awful. What else have I? Well nothing actually, but my friend Campbell might have. So I borrowed a tapered rotary rasp and power drill. This tapered from ¼" to ½" diameter and had a convex profile.

Now the variable speed of the electric drill became very useful. The hole was carefully enlarged, testing the size at short intervals with an old 5/8" dia bolt from my tin of odd bolts. Never throw anything away! Soon the bolt was a nice fit in the hole, binding, but not tight. Now repeat the process with the second bush.

It is difficult to push the bushes over the spade ends of the anti-roll bar I held the bar in a bench vice, pushed the bush on as far as possible by hand, then used a big box spanner to ease them past the spade end. After which it is easier to push them along to the correct position.

As I found when I tried to remove the nyloc nuts from the end of the anti-roll bar, they are rusty and stiff. In fact removal risks breakage of the links to the wishbone. In this case Campbell suggested slitting the bushes down the flat side so that they could be wrapped into place without removing the anti-roll bar, which was the method used when he owned a local garage.

Did the car pass the MOT? WELL.... The insurance ran out and I'm too skint to renew it at the moment. But the job is done.

The moral of our story? Nil Carborundum etc...

Or would Carborundum have helped? Oh dear!!

Best regards to yourself and able helpers - Dick Goodall - Muir of Ord

*Well thank you Dick, and I am sorry that we failed to supply the correct size of bush, I think fairy liquid, or swarfega might make a better lubricant than Carborundum mind you!*

*Oh, yes, while on the subject of Dick's letters, he was asking if anyone could help with a current address or telephone number for NAMRICK, a company from whom he used to buy tubs of plated high tensile steel nuts and bolts, but meantime he recommends John Worrall Exclusives of Stourbridge in West Midlands Tel 01299 250141 or fax 01299 250012 for stainless bits and pieces.*

## GETTING TECHNICAL

Another saga from Al Osborn

July 2000

Oil in the dashpot of the SU carb. The tuning guide for the SU says 'engine oil', and in some 'Haynes' I have seen 20/50 specifically mentioned, the reason being that the oil is there to dampen the rise of the piston under acceleration. In winter, with a cold engine, you will need that bit more richness, also when the engine is cold you need that bit more richness. The 20/50 should thin out a bit, as the engine gets hotter, hence helping warm up richness. The chances are though that the multigrade effect built into the oil is not effective at these outside temperatures of the carburettor as opposed to the inside temperature of the engine it is designed for. In summer the car warms up a bit quicker and you might need that bit more performance, hence 3 in 1 or auto transmission oil will do very nicely.

If you really want to experiment in this department, if you are aware of the state of tune of your S.U., and a fiddler, you might find, as I did, that the actual acceleration was rather finicky with regard to the oil type and quantity in the dashpot, and the state of the spring. After a few thousand miles these get a bit slack. Taking it out and pulling it so that it becomes an inch longer often did wonders! *I seem to remember a box that a Mini owning friend had, that had quit a collection of springs, all colour coded, for a variety of performance enhancements in S.U. Carburettors – Ed.* Then one day I wondered about the hole in the front of the carb next to the main choke input that delivers air to the rear of the slide. This hole actually feeds around the lifting pin. Why, I thought, should the air that is being sucked into the carb be right next to the 'atmosphere' hole that feeds to the rear of the slide? Surely for best acceleration you want the biggest differential in these airs? So I initially fed outside atmosphere to this hole (though not through the air cleaner) and was amazed in the instant tidiness of the pickup. So, never mind special tubes through air cleaners, just remove lifting pin, and drill hole to the same size ( $\frac{1}{4}$ " I think). Block up hole in front of carb. This also makes the flaring of the carb to the air cleaner much easier. Footnote, sometime later I found a very old S.U. carb with this very hole, i.e. no lifting pin, or hole in front face. So it appears that I yet again re-invented the wheel! I expect this operation is done the way it is in production to 'reduce pollution' i.e. even less chance of petrol fumes escaping to the outside world.

Further to my May / June suggestion of using Robin gearbox in a Kitten, and our Editors comments about the speedo ratios being wrong. You can get away with a one-tooth change in the pull out gear on the end of the speedo cable. I did it once – O.K. the next time I tried it the parts were too tight and the cable drive gear stripped itself. But then there is the speedo ratio itself, having a selection of these, a mismatch I had was cured with a clock change. So what with rear axle change in ratio also available to mess up the figures, you really can play a game of mix and match.

Cylinder head studs, lots of interesting thoughts, but why all the panic? Just take a drill to most of the head holes as per Dick Harvey's 750 Racer!

To Jim, the dodgy chemist, I too have tried EDTA in a motorcycle battery, the brown lead. something that was on the plates, totally disappeared after the treatment... But the battery still didn't work – ho hum. Now can you help us? Sometimes you fit a battery to a vehicle, and very soon one or both battery terminals start to generate a white rotting powder. What is it? And why do we only get it sometimes? A guess might be that it depends on the lead content of the terminal metal?



More questions! I see in the last Mewsletter a reference to a 40 B.H.P. engine and a 37 1/2 bhp engine, how was this done? the only variable I am conscious of would be a camshaft change. As I am into go faster cams hopefully I won't trip up on one of those go slower engines. Keep tweaking those whiskers!

A. Osborn

*Thanks for that Alan, I believe that the mods to the 850 engine for the 37.5 hi-torque (yellow Top) engine have been well documented, albeit not within these pages, so I may try to dig that out for a future edition, it was indeed to do with a special camshaft, but also higher compression and carburettor and distributor changes. I have very recently – July 2000 – had the use of a Kitten with one of those engines fitted, albeit with the wrong needle valve, and possible wrong distributor, but it really pulls well, and the extra torque makes up for any shortfall in bhp. I guess it's a bit like good oil flow being more important than actual out and out oil pressure!*

*Also, Alan was taking me to task for failing to advertise his engine tuning services, which he had made me aware of in his last letter. The reason that I did not mention them, lack of time again, was that I really wanted to clarify just what was being offered! Still, I can delegate, just give him a ring and I am sure he will explain. Alan Osborn 01953 884681, Fax and 'phone.*

Some More of the Answers!

So, your engine is still slowing down when the clutch pedal is pushed down, despite doing everything that Al Osborn suggested. Let's think about it for a moment, when you disengage the clutch, you are putting a load on the crankshaft – a mechanical end load.

If the crankshaft is not in the right place, end thrust on it when the clutch pedal is depressed can cause the small ends of the con rods to bear against the gudgeon pin bosses of the pistons, putting a heavy frictional load on the engine causing premature bore wear and in extreme cases broken piston rings (something that 850's seem to be prone to).

So, lets begin by putting the crankshaft in properly – *Ah yes, here we are back to engine build quality, and let us not forget that cleanliness is next to godliness whilst we are about it, Ed -*

Start by assembling the crank, con rods and pistons into the block, leaving out the thrust bearings. The bearing caps can at this stage be tightened to just over finger tightness.

Rotate the crankshaft several times to let the rods settle into their natural running position. Now measure the gaps between the sides of the small ends and the bosses of the pistons, if all are the same, position the crank so that the small ends are in the centre of the pistons. If one of the rods is nearer the front of the engine than the others, position the crank so that this rod is in the centre of its piston.

Now to the thrust bearings. Measure the gap \* between the machined face on the rear of the main bearing and the thrust flange of the crankshaft. It is likely that this measurement is greater than the thickness of the thrust bearing, so make up a shim to fit between the thrust bearing and the machines face of the main bearing cap. This shim needs to be just so, leaving no chance for the crankshaft to move forward, whilst at the same time not locking it up tight either. Next fit the steel thrust washer onto the crankshaft nose, and secure it against the shoulder on the crank. Now measure the gap for the outer thrust bearing if you have too small a space, fit a shim between the thrust washer and the shoulder. If the gap is too big, fit a shim in the same way as the first thrust bearing. With the



crankshaft biased forward, a five thou feeler between the thrust washer and its bearing will be just about right.

After torquing up the bottom half of the engine, fit the camshaft and front engine plate, and have a look at the timing chain sprocket alignment, a little careful checking and shimming of the crankshaft sprocket will work wonders for timing chain life.

I would suggest that alternator equipped engines have their tick over at about 900 r.p.m. with clutch up and no electrical load switched on. C.40 dynamo equipped vehicles will be quite happy at 750 – 800 r.p.m.

850cc engines with bendix starters can be fitted with the heavier 700 flywheel, the centre-bearing hole having been first machined to take the larger pilot bearing. This will improve low speed even running, as the heavier flywheel is storing more kinetic energy, and, as you have now fitted your crankshaft properly, the engine will spin up nicely from tick over.

Fitting a diaphragm type clutch will also help, as these have an “over centre” characteristic which requires less pedal pressure to hold in the fully withdrawn position.

Dave Richmond – Middlesex

*Thanks for that Dave, I know you will think it a silly question, but I did put an asterisk (\*) into the text at one point where you were talking about measuring a gap, my question, silly as it may sound, is how? I know that we have such things as feeler gauges, but to force one which is too large into a small gap between two parts that can move relative to each other can't be a reliable way of doing it, so what is the secret? Also, just how do you “make up a shim”? Daft questions I am sure, but we are not all engineers, and I am sure that I am not the only one who would like to know more of these technical secrets – Ed. I have built a number of engines over the years, and must confess that, apart from ensuring that everything is kept as clean as possible, have done little else, other than ensuring that the manifolds match the ports in the head correctly, to make the unit more reliable / smoother / higher performance.*

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### **Sales and Wants**

For Sale: - Two Kitten estate bodies and rolling chassis from which a number of spares have been removed. Contact Lari Parc

For Sale: - Two Kittens, a saloon and an estate, many spares. Both cars off the road for some time. Contact Mr. Baker from Daventry who is selling them on behalf of a friend.

For Sale: - Reliant Kitten saloon 1978, one owner, green, mot Sept, no tax, contact Bob Howarth £ 350 O.N.O.

For Sale: - Kitten DL Saloon M.O.T. to end June 2001, taxed till May 2001. Good tyres S.S. Exhaust, good battery, new clutch 2 years ago. 2 owners from new rare left hand drive. Tidy externally, interior poor £ 350 o.v.n.o.

For Sale: - Reliant Rebel saloon. 1969, tax exempt, in need of TLC, runs but no tax or test. Stainless exhaust and stainless fuel tank. Contact John Johnstone

For Sale: - A rare opportunity to acquire a Salamander. Running but no tax or test. Automatic Ford 1100cc powered, tow bar fitted. Contact Dave Thomas.

For Sale: - Reliant Kitten Estate car, orange, 'R' registered, used daily. Very clean & reliable. Taxed & M.O.T.'d £ 300 o.v.n.o. (Lady owner)

For Sale: - 1980 Kitten estate full years M.O.T. 6 months tax with spares car which is complete but for engine & radiator. Yellow £ 450.

For Sale: - Kitten estate in need of a new hone,

For Sale: - Reliant Fox, Dec '85. Fitted with the following: - High lift camshaft by Kent, lead free head, alloy rocker box, Reliant 4 way S.S. exhaust manifold. Expansion radiator bottle, electronic ignition, Kenlowe fan, extra junction box, oil pressure gauge, rev counter, ammeter, high ignition coil, stereo radio + C.box, cig socket outlet. Seats by Corbeau, van windows by marine firm, sunroof etc. This concours-winning vehicle will be available from late 2000. Contact Bob Hunt

For Sale: - Reliant Rebel estate. Project. (Now that I have a nice Rebel estate on the road) A fully refurbished chassis, with running gear, and a car less front dampers and engine and gearbox. Contact Brian on 0141 8866117.

Kittens galore For Sale: - W registered estate, needs work & tyres. P reg. Saloon in kit form. Seized engine, front hugs missing. S reg. Body shell complete with glass trim, wiring harness. Open to offers.

For Sale: - 2 Kitten exhausts, 1 brown rear estate door, engine & various other parts, Contact John Wheeler

For Sale: - 2 Kittens, one saloon, one estate, free to a good home,

For Sale: - Rebel rear axle, also a 700cc engine with new pistons etc. Contact Den Houchin

For Sale: - one owner from new Fox. Just 48,878 miles, Years MOT and 9 months Tax. All seats recovered. Rear seats and side windows, new tyres and exhaust. £ 600 o.n.o.

Wanted: - 600cc Rebel complete or parts wanted for rebuild project. Anything considered.

Wanted: - Kitten estate Tow Bar. Contact Peter Swan

## **NOTES**

Richard Plaxton, in amongst other great ideas, was suggesting that the website might contain details of Club activities. Now Richard is in a minority amongst our subscribers in that he is also a member of the Reliant Owners Club (as indeed I am myself). But I was wondering Richard if you were confusing the two, as the R.O.C. does have regular events, while the Register does not as a rule – though we have been known to make the odd appearance at a Classic car show. Or were you looking forward to the day when we do manage to encourage local groups of Register subscribers to get together and attend such events, or even organise their own? Is this a bit like my own confusion about the difference between a web page and a web site I wonder?

Purely in passing, (dodgy chemists was the train of thought!) I just had a telephone call from a neighbour to ask if my daughter had any nail varnish remover, so I shouted through to Arleen asking if she had any acetone, and she came through with a plastic container of what called itself acetone free nail varnish remover – just what are these chemists up to these days? (Are they really clever, and trying to protect the environment? Is the new product in fact anything like as good as the old faithful ways? )

Right, here we are at last, I can tell you that this edition is the slowest one I have ever produced – all these trips south of the border – John Pearce had the covers with me a fortnight ago now, and I have been really slow off the mark. Excuses, well, none really, lethargy seems to be the cry of the month. We have a lot of cars advertised this time round, several of them belong to people who are not subscribers, but have contacted me with cars to dispose of, so there are plenty of opportunities out there.

I must just use this little bit of space to say to Ashley, well I think that is who I am talking about, blue Rebel estate, scruffy body, very neat blue dash top, did the R.O.C. run to John O’Groats recently, looking for a Bug and a Kitten. Ashley, if you were to subscribe, then I would have your details on file, and getting in touch would be a lot simpler from my point of view! I know that you said one of your local R.O.C. branch members lets you see the mewsletters, but if you are looking for a car, the simplest way is to join up, and so be on the mailing list. (Ashley had complained that he has just missed a car for sale by half an hour, but I really can’t be expected to feel responsible for people who do not subscribe). Ashley, I do not have your address on file, but I will be happy to send you an application form if you drop me a note in the post.

Take care, enjoy what is left of the summer, talk to you again in a few weeks time.

*Brian*