

Reliant Kitten *Register*

NEWSLETTER 64

May – June 2005



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

MOTOR INSURANCE

IMMEDIATE COVER FROM THE SPECIALISTS



A Member of the General Insurance Standards Council

Free quotation
Payment by Credit Card
Payment by instalments



Underwritten by a leading UK insurer or at Lloyds
High quality advice from trained staff
Nationwide Service
Fast, efficient claims handling

Phone Us on 01530 270574

The Reliant Kitten Register MEWSLETTER 64

Rebel parts stock

Kitten / Fox parts stock

Rebel alternative parts

Kitten alternative parts

Fox alternative parts

Our Mutual Aid Spares scheme

Mewsletter pictures

The Register is a member of the FBHVC, which monitors UK & EU legislation and lobbies on our behalf to protect our freedom to use vehicles of all ages on the roads. Readers are invited to show their own support of this worthy cause by becoming members in their own right. Contact the editor for details.

Our front cover picture this time is hot off the press from Burford. Special thanks to John for going along on the Saturday to take a couple of snaps, and then dashing home to print them off and deliver them to me at the Cotswold Wildlife Park on the Sunday, well done John. The car featured is not just a Tempest, but the first Tempest Kit that John Box sold. Currently the property of Stuart Vickers from East Yorkshire, its – ahh, I need to do some research here, I was going to say fourth owner, but I need to check who Steve Campbell sold it too after he acquired it from Joe. Anyway, great to see it out in the daylight again.

web page :- <http://www.uk-classic-cars.com/kitten.htm>

or have a look at <http://www.reliantkitten.co.uk>

INDEX

Page 3	Contact details and cover story
Page 4	Index
Page 5	the Registrar speaks
Page 6	and records some memories of
Page 7	our first meeting in Burford
Page 8	Rebel Round up
Page 9	Foxes Den
Page 10	Liege Page
Page 11	Matters Tempestuous
Page 12	A missing link!
Page 13	Readers Letters
Page 14	A bit of an Ass!
Page 15	More nonsense, and a brief Tale from Tore
Page 16	Getting Technical
Page 17	on oil filters
Page 18	and carburettor
Page 19	needle valves
Page 20	Disc brake conversion
Page 21	Snippets from the net
Page 22	still on carbs
Page 23	More nonsense
Page 24	Sales & Wants
Page 25	Epilogue
Page 26	Advert

It should be noted that opinions and ideas, information and advice printed in this publication are as recommended by our readers and others, and, while believed to be accurate and correct, such information is given in good faith, and it does not necessarily have the approval of the Reliant Kitten Register, and cannot be guaranteed by either the Editor, or 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.

The Registrar speaks

Oops, I've gone and done it again, and allowed a number of editions to go to print with little or no mention of the generous support given to this Register and its subscribers by Rob Spare of P.F. Spare the insurance intermediary.

The annual prize of a years free insurance has been won this year by a Scottish resident subscriber, congratulations Gavin McMurdo, I have been curious, it is now April, back in February Gavin had kindly allowed me to sell his new Kitten front dampers to a customer of Reliant's who was having an Asquith van renovated, and Gavin was prepared to wait for his till the new batch came in, which it did last month. Thank you again Gavin for your patience. Gavin said he would collect them from me, and I am wondering if that will have happened before he reads this! Anyway Gavin, your voucher for a years free insurance is here – it is in a poly-pocket on the top of the bottom drawer, the grey one, of the stack of drawers on the left hand side above my desk, in case I forget!

So, with thanks to Rob Spare for his continued support, I will get on.

Alan Shaw also deserves special mention, he was good enough to provide me with yet another technical article, in spite of my shortcomings of the past, thank you Alan.

I have had a very lazy month in May, not doing nothing, there were trophies to organise, and indeed canes to remember, and a couple of forms to create and remember to take with us to Burford. Many thanks to all who came along. Mistakes, yes we made a few, the lack of identity badges for everyone for one – with my memory a major shortcoming! As far as I know, everyone did "sign in", so we have a record, what I should have done was made sure that I took a picture of every car there, with its owner beside it. We met so many people. Most of whom I had only ever corresponded with or spoken to on the telephone, and while I now have a number of faces to put to a number of names, I am struggling to remember which was who so to speak, really should have pictured everyone beside their cars. Still, we did that with the winners, so all is not lost.

I do feel the need to apologise to all the Tempest owners who were there with their cars. The absence of an entry list had made it pure guesswork to know what prizes to bring along. Should I bring one for first second and third places?, and if so should I do that for all classes? – well that would have cost about a thousand pounds in trophies and shields, and with no income from the event I really could not do that. So the dreaded word compromise struck, and we only had first second and third overall, along with a couple of distance awards, a couple because I did not want to exclude all U.K. entrants from any chance of winning that, knowing that Patrick Vallet was coming all the way from Switzerland in his right hand drive restored Kitten estate, so he would obviously have the edge on anyone else as far as distance to Burford went – great to meet you Patrick, and congratulations both on making the journey, and the high standard of work done on the car. Did you know he made many of the bits himself, like the wood rimmed steering wheel, the alloy rocker cover, the imitation knock on hub spinners on the wheels, the wooden dashboard, alloy gear lever top, bucket seats, oh the list is almost endless, cost him dearly in the originality stakes mind you, which was just as well, because the standard of vehicle was so high, that picking the best one was very difficult indeed. Which brings me back to the point, the Tempest owners lost out, through no fault of theirs, to our arbitrary scoring system, we really could not envisage having three Tempests take the three top prizes with such a high calibre of Kittens present, so we marked them down on originality, hardly fair I know, and had I realised how many would be there, I would have arranged a specific Tempest award, hindsight is wonderful, isn't it? My vote, should there be a next time, is to have the concours self judging, i.e. those who wish to enter, have to judge every other entrant, that would relieve a whole lot of responsibility from the judge / judges, and perhaps produce a different result, certainly it would bring home to those taking part just how difficult it can be deciding on a winner.

Oh, almost forgot, who won the U.K. distance award? No not Moira and I, we had not come in a Reliant, and Peter and Jennifer Linfield live in Banavie, north of Fort William, over 100 miles up the road

from Renfrew, so at almost 500 miles, they won it by more than a mile or two, well done Peter and Jennifer.

Also, a very nice Kitten, which only failed to win a prize because of shortcomings on the originality front, was Bob Keen's very nicely turned out yellow saloon, from Maidenhead, the one with the two litre Ford engine, a very potent car indeed, a real wolf in sheep's clothing if ever I saw one, and a beautifully turned out example, yes, I should have had a "non-standard" or "modified" class award, but again, not knowing who would be there, and anyway, would it have beaten Patrick's? Where do you stop? As it was we spent almost £300 on the trophies and awards, and there are limits. So with apologies to anyone who felt left out, and there must have been some given the very high standard of cars, decisions had to be made, and I need to thank not only John Pearce, who did the judging with me, but Dave Price, who saved the day by enabling us to get our best five cars down to three. After spending well over an hour and a half carefully giving each car points out of 20 for each of the 4 areas judged, (I had originally intended points for the chassis as well, but the damp grass, and perhaps more to the point, my inability to get up after kneeling down these days, put paid to that plan!) we had a tie for first place, and three tying for second!

I felt terrible when doing the judging both because I was too busy looking at the cars to engage in much conversation with the owners, a missed opportunity if ever there was one, but time was pressing and I had to try and keep the score sheet as dry as possible, so the pen would write on the paper, my apologies to those concerned, we did have to press on. Recording registration numbers, and points totals, (points were awarded for body, interior, engine bay and originality) I had no idea who the winners were till Dave and John helped me out cross referencing those details to actual real people, and by the time we got the finalists to park their cars in a line up for a picture, I had forgotten who was who!

We had just the one Rebel and one Fox present, good to see them both. I was sorry to learn that Eric Satterley who had camped overnight in his folding caravan that he tows behind his Rebel, had decided to head for home on the /Sunday morning, Eric was at the end of a two week holiday, and the rain on the Saturday had been pretty heavy, so drying out was a priority, sorry to have missed you Eric.

At the end of the day Len Gardner in SHP 219R came first with his beautifully turned out Kitten van, closely followed by Malcolm Rush in SLK 558W, his Kitten estate, and Ray Best came third in PVJ 717R. Terry Dixon narrowly won the driving test fractionally ahead of Peter Linfield, Bob Keen taking third place, see, too much power on grass can be difficult to control!

The venue was great, well done Dave, the weather held up pretty well, not breaking down till after 4:00pm, and it was great to meet everyone, will we do it again? Well, the consensus was yes definitely, but not every year. Perhaps in a couple of years time, further north, to give some of those southerners a chance at the distance award you understand – any volunteers to organise it?

Rebel Round up

Dear Brian,

23rd April 2005

Many moons ago, I seem to recollect some discussion of various ways of raising the rear axle ratio on a Rebel, e.g. fitting a different axle. This would be an improvement for me on account of the Ford Escort 1300 engine! Please is there anyone out there who has practical experience of doing this and could tell me what is involved?

By the time this gets into print I guess we will have met up at the Kitten 30th event and hopefully enjoyed ourselves – so a big thank you to Dave Price for organising the whole thing for us, and of course a big thank you to Brian for keeping the excellent newsletter going.

Best wishes, John Parker – No. 301 Rebel estate OHW 267M - Bristol

Thanks John, I know that Scott Rodgers fitted a three wheeler axle to his Rebel to help get round that situation, he also fitted bigger wheels,(14" I think, with modified wheel arches to cope) I am telling you this because he no longer has that car, and is no longer on the mailing list. I will ask him when I am talking to him, but I know it involved a lot of welding, and the handbrake was different, and the springs mounted on the other side of the axle tubes, it was a lot of work. At that time the car had a Talbot Sunbeam engine, quite like the Imp, but not transverse, and when he sold that car to Jim Spence, he wanted more power after a year or so, and fitted a Vauxhall Carlton 1.8 engine and gearbox, which still used the three wheeler axle. Jim has since sold the car, but I don't think he had anything to do with the axle change – am I right Jim?

You can easily improve things a bit (if you have not already done so) by fitting 13" wheels, I have even used Morris Minor 14" ones, but they are tight. So long as you don't fit low profile tyres, that will help a bit.

~.~.~.~.~.~.~.~.~.~

Foxes Den

I know that Duncan Bradford is having concerns relating to speedo accuracy, and he is looking for the definitive word of speedo drive gears, heads, and no doubt also axle ratios.

I learnt recently that Hans Kirrima of Rebels Racing has in fact now built no less than 68 of his oval circuit Rebel racing cars, (am I the only one who has noticed that those excited formula one commentators can make "Red Bull Racing" sound very like "Rebel Racing"?) what I had not realised is that he uses Fox crown wheel and pinions in them, and has stripped those parts from many Foxes over the years, often replacing them with Kitten ones. So, assume nothing! Get counting actual revolutions.

Now, as to the method. Well, come on folks, help me out here. I guess you need to lift one back wheel off the ground, make sure the other one can't turn, and count how often the propshaft turns for one revolution of the wheel. Or is that how often the wheel turns for one revolution of the propshaft – think about it! Then because you are only turning one wheel I guess division by 2 would seem appropriate. That should give you a number, mind you how do you accurately count the part of the last revolution, and do you ignore the backlash in the diff, well I guess of course you do is the answer to that one. Then we have the speedo head calibration to consider, I know that Kittens had two different ones, from when they, for whatever reason, changed the speedo drive gear from 10 teeth to 11, or was it from 11 to 10, I know I should know, but I can't remember, all I do know is that they changed this feature part way through the Kittens production life. The speedos had in the small print on the face, numbers like 980 and 1124 or something like that from memory. What about the Fox ones then?

It has, it seems to me, been a while since I slipped into old song titles, but we do seem to have more questions than answers here.

Responses eagerly awaited.

~.~.~.~.~.~.~.~.~.~

Liege Page

I can tell you that the Liege Car Club is doing very well. In spite of it being, like the Register, a group that covers not only the whole of the U.K., but the rest of the world as well, they manage to have meetings several times a year. The most recent of these was their "Tour of the Roses", an 85 mile road run organised by Steve Kenny, which started from the John Milne pub in Milnrow near Rochdale, and ended a few miles along the road at the Rose and Bowl in Stacksteads. I had decided to tag along in the trusty Citroen. Peter Davis had, as he so often does, loaned Liege Number One out for the weekend, and Mark and Jenny Endley had a great time exercising Number One, I am sure they can't wait to get one of their own.

Paul Wheatley did offer me a seat in "Little Lucy", (they all have names for their cars you know, mind you, confusion will abound in the future, both Paul and Steve have young daughters called Lucy!), but he has yet to graduate to a hood, and we even had hail as well as rain between the sunshine that day, so I chickened out and let James, the 12 year old son of the event organiser fill that vacant Liege seat. John and Mel, who run the Liege Club had come all the way from Cornwall, and in all there were 11 Liege and my Citroen, with a Polo a Mini and a Rover, though I was the only non-Liege daft enough to follow them on one of the untarmacked tracks – just had to show them what a Citroen can do with its marvellous ability to lift its skirts and scramble through the muddles (muddy puddles) – wonderful thing variable ride height suspension you know, though raising it does reduce the suspension travel, nothing is for nothing, but the increased ground clearance make some otherwise impossible terrain quite easy, if a little bumpy!

I can honestly say that I can't remember the last time I encountered so many hairpins in the one day, two fords as well, and some wonderful sights in the form of buildings, incredible views, a number of old industrial chimneys that Fred Dibnah hadn't got his hands on, all in all a wonderful run, well done Steve for planning and organising such a great event.

I did say at the end that I had for a while forgotten that it is not just driving a Liege that can bring a silly grin to one's face, just driving briskly on the right kind of road does it every time for me, and I had a really silly grin a few times that Sunday afternoon.

On two of the climbs I actually thought the Citroen was going to drop to first gear, almost unheard of in my 200,000 plus miles of Citroen motoring in the past decade behind that wonderful Peugeot diesel engine (when not towing, which I no longer do). Two of the hills were so steep that, had they been a few furlongs longer I do not doubt that first would have been required, and before all you Liege guys laugh your heads off, remember that the BX weighs at least three times what your Liege does, though I can honestly say that its driver is a couple of stones lighter than he was at this time last year, and no, amputation was not involved!

~.~.~.~.~.~.~.~

Matters Tempestuous

Hello All, as you may have seen in the last Mewsletter, Brian put out a request for Tempest owners to contact me as I have volunteered to take on the role as Tempest Registrar. Some members certainly have got hold of me and have been forthcoming with their tales. I know that a lot more exist out there and am keen to get hold of the owners, so if you know any of them, put them in touch! I have also talked to Mike Philips who also has a mutual interest in tuned Moto Guzzi motorcycles and continues to develop the Tempest project. Things took a bit of a break last year due to personal circumstances, but things seem to be moving in the right direction again. I suspect it may be a few months yet before we hear big news but watch this space on that front, there is no doubting his long term commitment to the project.

My Tempest I bought recently by winning it on an auction site and is a Steve Campbell kit in near MOT condition. It meant having to pick it up from North Wales, and persuade a friend to drive a car transporter from London and back in a day, but we managed it without too many difficulties. The car has been fitted with 14 inch wire wheels, but I believe still has the original kitten rear axle so this may need changing. However, with a tuned head, manifold and Weber carb with one of Rebel racing's exhausts to go on, it may pull the gearing yet. The seats also have to be changed (something from a Ford Galaxy seem to be in there at the moment!) as well as various finishing items like reworking the dashboard. The remote gear change also needs to be sorted (one item which seems to cause a number of owners difficulties) as the previous owner tried his own rather crude version, which works but I wouldn't like to try it on the road! Anyway, I will give more details of my progress / findings / state of the Tempest register in the next issues.

Martin Seymour - London

~.~.~.~.~.~.~.~.~

What's the link between a Reliant Kitten and Northwick Manor Junior School?

Does the School have a sturdy steel chassis with a rustproof fibreglass body?

Can you fit 270 children into a Kitten?

Do they both have a 30th birthday in 2005? **YES!**

My local Junior School in Worcester will be celebrating its 30th birthday this summer with a 1970's themed Summer Fayre on Saturday July 2nd. We hope to have some cars from the 1970's to compliment music, school uniform etc., I am sure that you might feel that the afternoon would not be complete without a Reliant Kitten, so if you can bring yours, please get in touch.

Northwick Manor Junior School has 270 boys and girls aged from 7 to 11 in twelve classes. Children attending the school come mainly from the north off Worcester. The school has a good academic and sports record. It moved to its present site in 1975, a few years after the adjacent infant school had been built.

The Summer Fayre is organised by the friends of the school (PTA), with input from the governors and help from the staff and pupils, and usually raises over £1,000. Our aim this year is to add to the equipment in the playground.

Thanks Brian for agreeing to publish this in your Mewsletter at the very time that I know you are having your own 30th anniversary do in the Cotswolds, I hope the weather is kind to you on the weekend.

Yours sincerely, Adrian Giles MRPharmS

~.~.~.~.~.~.~.~.~

Readers Letters

Dear Brian,

3/4/05

Somewhat belatedly I enclose an account of my husband's Fox disc brake conversion. It's also his first attempt at using our computer...

The reason it all happened at all, the brake conversion I mean, was because we found ourselves on Dartmoor going down a 1 in 4 hill in second gear, pumping the brakes and completely unable to stop. Dropping down into bottom gear did not seem like an option. We reached the bottom of the hill in one piece, but not before I had kittens and puppies as well, and I promised Arthur that that was it, the Fox would have to go.

Anyway, that was over two years ago, the brake upgrade has been very successful, and we still have the Fox.

Arthur wants to know if we will forfeit our membership of the Register if he puts in a bigger engine? Nicky.

Nicky, what can I say? I had been aware of this conversion for a couple of years, and a disc brake conversion is one recurring question that I am asked about. As regular readers may recall we have covered this in the past on a couple of Kittens, a Rebel and a Tempest. All using different methods to resolve the technical problems. As you will read in Arthur's article in the technical section, there is quite a bit of engineering and craftsmanship involved in this particular solution. I know that in most of the other solutions, a calliper and 12" wheel were found that could cope with the clearances required, and Arthur does not tell us about the different circumference, if any, that his 13" wheels introduce into the gearing of the Fox. I know from a number of Fox owners, that clearance, even for the original 12" wheels, can be tight round the front wheel arches. I also know that low profile tyres can mean no change in circumference between a 12" wheel and a 13" one, a reduction is even possible, but I am curious.

Anyway, who said that you can't teach an old dog new tricks? Congratulations Arthur on your introduction to the world of computers, the ability to just scan it in at this end saved me the half an hour or so it seems to take me to type a page these days, well done. (I happen to know that Arthur is a decade or two longer in the tooth than your Editor). Oh, on the bigger engine front, the largest piston engined one I know of is 3.5 litres, mind you, he is not a subscriber, I think the largest engine in a Kitten on our circulation list is 2 litres, but there was the gas turbine one, how does one measure the swept volume of a gas turbine I wonder? (only joking). Then there are these electric people, no, I don't think they have more power – yet! In short Arthur, we will not exclude you if you choose to expand the number of cubic centimetres to exceed our stated one litre limit, it is a manufacturers feature of our fine wee cars, and not something I feel obliged to adhere to. I mean, could you see me excluding the factory built 1600cc Rebel prototype if it still existed? I just did not want to be seen to be poaching Scimitar owners when coming up with a description of eligible vehicles!" Brian

~.~.~.~.~.~.~.~.~

On April the 26th Alan Yates from Conwy re-joined our ranks, welcome back Alan. One thing Alan asked was if I could locate a rear axle hub puller for him to use. That reminded me of an area I have been meaning to do something about for a while now, namely a tool hire facility within the Register. Ho hum, more work. However if anyone reading this has experience of such a thing from another organisation, feel free to offer advice. Apart from the cost of tools, the cost of transporting them would be an area of concern I suspect, but talk to me.

Meantime if you can help Alan out, please let me know, or give him a ring on 01745 823242.

~.~.~.~.~.~.~.~.~

The Donkey Story – a parable

One day a donkey fell down a farmer's well. The animal cried piteously for hours as the farmer tried to decide what to do. Finally he made up his mind, as the animal was old, and the well needed to be covered up anyway, it just was not worth trying to save the donkey.

So he invited his neighbours over to help him. They all brought a shovel and began to fill in the well. At first, the donkey cried horribly as he realised what was happening, then, to everyone's surprise, he quietened down.

A few shovels later and the farmer looked down the well. He was astonished to see that the donkey was doing something amazing. With each shovelful of dirt that landed on his back, he would simply shake it off and step on top of it, tramping the dirt firmly underhoof. As the farmer and his neighbours continued to shovel dirt down the well, the donkey continued to shake it off, and climb on top of the pile. Pretty soon everyone was amazed as the donkey stepped over the top of the well and happily trotted off.

Life is going to shovel all kinds of dirt on you, the trick is to shake it off and move onward and upward. Our troubles are like stepping stones, we can get out of the deepest wells just by not stopping, never giving up! Shake it off and take a step up.

~.~.~.~.~.~.~.~.~

Can you read this?

I cdnuolt blveiee taht I cluod aulacly uesdnatnrd waht I was rdanieg The phaonmneal pweor of the hmuan mnid Aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mtttaer in waht oredr the ltteers in a wrod are, the olny iprmoatnt tihg is taht the frist! and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it wouthit a porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Amzanig huh? yaeh and I awlyas thought slpeling was ipmorantt.

Oh well, there we are, I should let my proof readers have holiday! Tahkns to Jim Smith for taht sinpept.

~.~.~.~.~.~.~.~.~

Tales from Tore

Right, with apologies to Dick, I am right out of time, and space, I called on Dick to proof read this edition for us, and I am sure he must have wondered why, at that stage, this page was just a heading – well sorry Dick, and thanks for your help, next time, honest! Brian

~.~.~.~.~.~.~.~.~

Getting technical

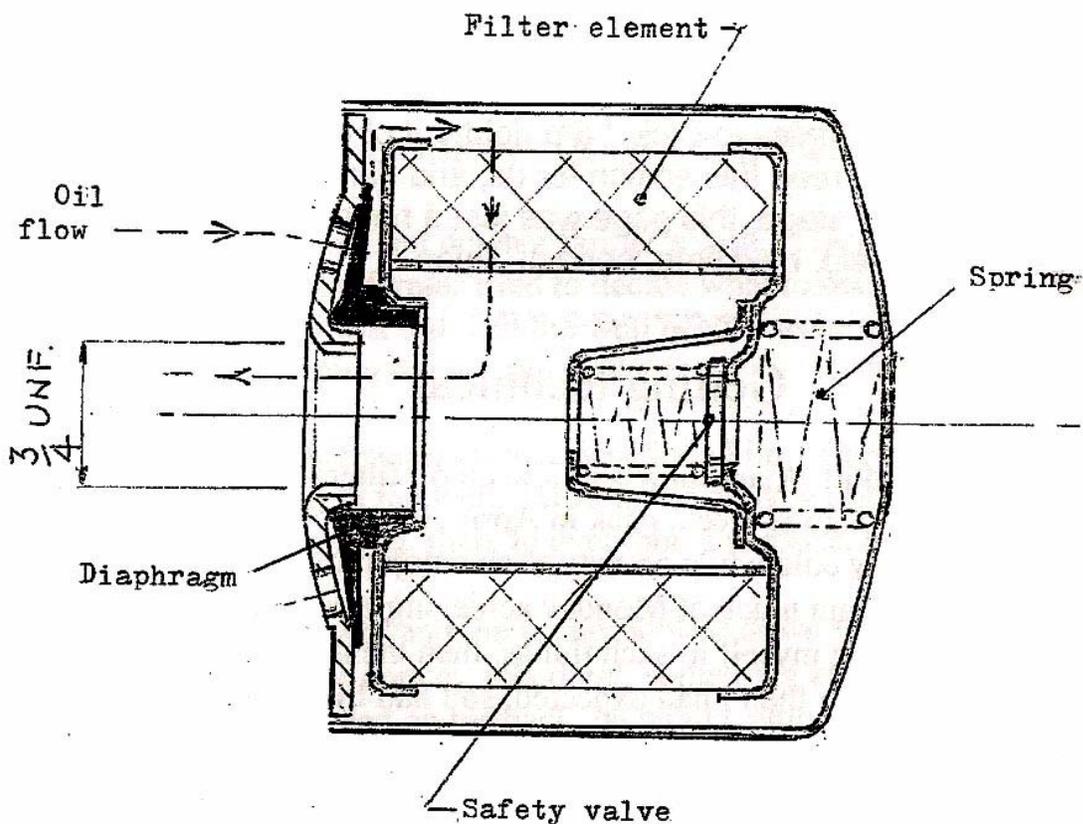
I finally found it! Alan Shaw's article on oil filters I mean. It came to light during what was a good week, back in April. It was one of those weeks when, having got really cold while on duty at an autojumble on the Sunday, I spent Sunday evening and much of Monday achieving even less than usual, wondering why I subject myself to such things, then the magazines were suddenly available earlier than I had expected, so I had to do a label print run, and address and stamp the better part of 300 envelopes, then, after consultation with Dave, create the flyer about the anniversary event, then pack and post the envelopes. I managed all that in just two days, something of a record for me these days, and I still had the energy on the Thursday to "process" the contents of 7 boxes of paperwork, shredding, filing, recycling, and

even typing, finally reducing the 7 to just 2, (yes there were 4 different sizes of box, but the two I was left with were not the largest 2!) closely followed by a third after clearing the desk the easy way, again, phew, but it was a great feeling, 4 of those boxes have been lying in the hall since the New Year, and at the end of the day it only took a few hours to deal with most of them and do the filing – oh for such energy and mental attitude more often! Did I eat something different that week? I really don't know, I did have duck for lunch on Wednesday, (mind you, by then I had done most of the 'work') and while I love duck, it is only about the fourth time in my life I have had it – perhaps I will not leave it so long till trying it again!! Anyway, enough digression, thank you Alan, I will try to be more careful in future – one day I will uncover the article on rear damper mounting failure solutions that you sent me last year.

~~~~~.

## Report on a misbehaving oil filter

Reliant 850 Engine  
Oil filter



The diagram above gives details of the oil filter for the Reliant 850c.c. engines. When working normally, oil from the pump goes through the 8 holes on the left hand side of the diagram, displaces the rubber diaphragm, passes through the filter element, and leaves via the  $\frac{3}{4}$ " U.N.F. connection to the engine block.

If the filter element becomes blocked, pressure builds up and opens the spring-loaded safety valve. The oil is now unfiltered, but better than reduced pressure, or no oil at all.

*The filter element is held up against the diaphragm boss by the larger spring on the R.H.S. The locations of spring and element are not very positive, and it sometimes happens that both are eccentric at this end. As a result, the diaphragm can be distorted and leave some of the oil inlet holes not properly covered under 'no pressure' conditions, and more oil drains back into the sump than should.*

*This is not a cause of great concern. The oil pressure when the engine is running is not affected, but the delay in building up pressure on starting, whilst not as much as when a new filter is fitted, is annoying.*

*A new filter is easily checked by screwing a bit of heater hose into the 3/4" U.N.F. and blowing down it. 'Seal' or 'leak' are alike beyond doubt. The same technique can be used to check a filter taken from the engine, in this event, a longer length of hose is recommended.*

*The element can be centralised using a screwdriver or whatever through the 3/4" U.N.F. to push the safety valve casing sideways. Careful inspection of the diaphragm through the oil inlet holes may show which way to push.*

A. Shaw - Stalybridge 20.01.05

~.~.~.~.~.~.~.~.~

*There was a story in here about my finding Alan's drawings for the rear damper repair, and so I did, but then he gave me the following fascinating article on carburetor needle valves, and it fits the available space better, thanks Alan. Oh, by the way, I did ask, and he will modify yours to a stainless one for a fiver, and that's delivered, all you need to do is send him your old one. See over for his address. Ed.*

~.~.~.~.~.~.~.~.~

## **Needle and Seat Assemblies for S.U. 1 1/4" carburetors**

Referring to the drawing opposite, the only significant wear takes place where the needle makes contact with the seat. Distance "D" gradually diminishes until the float makes contact with bowl cover before pushing the needle far enough up. When this happens, and perhaps a little earlier, the mixture is likely to become richer, and, if the vehicle is left for any length of time pointing down a slope, petrol can pass through and flood the engine.

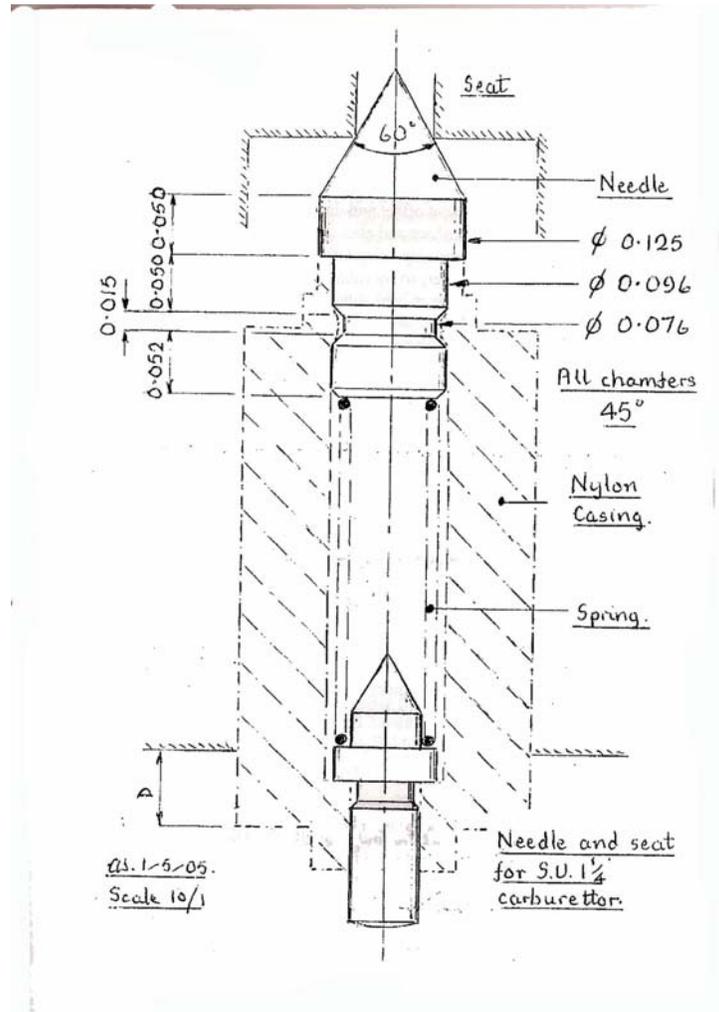
Some experiments indicate that the assembly works well if "D" is about 1/8", and that 3/32" is probably what the makers intended, and that if 1/16" is reached, trouble is not far away.

All that is needed is a new needle, an item not hard to make. I am currently running with one made from stainless steel, hoping that it will last longer than the original brass.

The needle is held in place by a small lip in the Nylon which engages with the 0.076 groove. It can be removed by gripping the 0.125 diameter in the vice and carefully wobbling the Nylon away. (Don't lose the spring). By the time you've separated the two you may well wonder why they bothered with lip and groove, the needle is pretty tight in the casing. Don't be surprised if the groove doesn't look like the drawing, of the six that I've stripped so far, no two are alike.

On a replacement needle, an increase in length of the .0125 diameter to about 0.065 should compensate for seat wear. If not, the seat is easily deepened for an insert. In making the needle, it is better never to handle it. I can provide an operation sequence for anyone having difficulty.

A. Shaw 1/5/05



Dear Brian,

3/4/05

After the note you put in with my last Mewsletter re. Fox disc brake conversion. Well after some basic research I found I couldn't get suitable discs and calipers to fit inside the 12in Fox wheel, so I decided to fit 13in wheels, but none were available with sufficient offset and the correct stud centres, so I would have to settle for correct offset and alter the stud centres. My solution was to use Vauxhall Nova wheels. By using larger studs, Ford single wheel Transit rear studs which are thicker, so by enlarging the holes and at the same time offsetting them outwards, we arrived at the correct centres. The next step, Vauxhall Astra discs gave the required offset. Next the calipers, Rover 214 series 1, fitted to 6mm thick steel plates which were fashioned and drilled to fit the stub axle in place of brake back plate.

Before fitting studs, the outside diameter of the hub has to be machined to fit inside diameter of disc to maintain concentricity, and also the centre boss on the face of the hub has to be reduced to fit the hole in the disc, so as to avoid modifying the disc.

I stuck to the original hoses from the chassis to the stub axles, and had specials made up from stub axle to calipers. They were made by a firm in Bridgwater Somerset, but this was done through my local Motor Factor.

I also fitted the larger studs to the rear hubs so I wouldn't have to carry 2 spare wheels. And to keep the clearance right, particularly for the rear wheels, I fitted 1/2in Mini wheel spacers all round.

Then to improve things even more I obtained a remote servo, connected it to the front brakes only, and they work beautifully.

I hope this is of some interest.

Arthur Silby - Lelant, St. Ives

*Arthur, thank you. Makes me feel a bit inferior when these engineering types make it all sound so simple mind you. I mean, "fashion two 6mm steel plates to fit the stub axle in place of the backplates" Fine, but how? Where do you get the material for a start? and how on earth do you "just offset the holes in the wheels outwards and arrive at the correct centres" - if I tried that I am sure they would wobble all over the place, but he makes it sound so simple. And these thicker Ford studs, what do you need to do to fit them to the hubs? As for the comment, about fitting a servo to the front wheels only, how do you do that? Aye, he makes it all sound jolly easy, and I am quite sure it is beyond most of us. Ah well, I did ask, and I am very grateful for the information. Oh, and a jolly good first attempt at word processing Arthur, well done. That said I am a bit puzzled because I know at least two folk, who did it and I think are still using 12" wheels, but this wonderful memory of mine can't remember what callipers, I think Ford Fiesta, for one, but can't be certain – Dick will look it up in the index for me I am sure, Ed.*

*Just for the record, I am forever failing to communicate effectively, and while it alters not a jot the details above, the Fox referred to is in fact one of the Tandy Campervans, and so it is perhaps a little more difficult to retard the progress of such a vehicle on a downhill stretch of road due to the extra weight of the larger body and extra equipment on board, compared to a standard Fox van or pick-up.*

~.~.~.~.~.~.~.~

### **More snippets from the net :-**

I mentioned a while ago that I would try fitting an insulator block between the inlet manifold heater and the SU carburettor on my Fox to overcome its hot starting problem. Here's what happened.

I ordered an HS2 insulator block (SU part no. AEA586) from my local carburettor / boy racer accessory shop here in Brighton (Formula One). I was a little shocked to find that this fat black washer cost me over £10.

However, when it arrived it was obviously going to be too thick for a straight fit on the Reliant engine. As supplied it was 22 mm total thickness. This would cause the base of the jet on the SU to foul the rocker cover, so a bit of adjusting would be required.

I approximated the maximum offset from the SU's standard position that could be accommodated without any fouling (jet lowered on full choke) and was disappointed to find this to be about 11 mm.

Leaving some clearance room, I decided on a 9 mm wide insulator block and prepared to machine down the one I had just bought. I did the "machining" by inserting a 50 mm, straight cut circular blade onto a router mandrel and locked the blade at 9.5 mm above the router bed.

With the router upside down it was a simple matter to slide the block around the blade and slice it in two pieces at the appropriate place (watch fingers!).

A bit of polishing of the cut face on some medium wet'n'dry on a flat bed tidies up the insulator.

For the longer mounting studs required, I noticed that M10 threaded rod screws with ease into the 3/8" UNC (at least I think that's what it is) thread in the inlet manifold heater.

*Editor's note, I had Dick Goodall proof read this edition for us, and he made the following comment, which is not only interesting, but helps address my own concern about using the wrong parts!*

*This fascinates me. A 3/8" UNC thread is 0.375" OD with 16 tpi = 0.062" pitch. My tables give M 10 SI thread as 0.394" OD and 0.059" pitch. Might be possible with a worn, tapped hole?? Think I would have*

*been happier using 3/8" Whit which is 0.375" OD and 0.062" pitch. Perhaps the only good thing to come out of WW2 was that UNC and Whit. thread forms were, in many OD sizes, made compatible with each other to aid in the interchange of parts between British and US equipment. And so ends my blethering for today. #157*

I cut the appropriate length replacement studs from a piece of this and refitted the SU with block, new gaskets, studs, new nuts and spring washers.

Back on the road, my Fox is showing a sweeter side of its nature. No more hissy fits when trying to start from hot. It even runs smoother during long periods of crawling in slow traffic when the engine temperature is up.

The best mod I've done so far and very recommended. It's not a total solution. My Fox has had one hot starting episode since I did this (two weeks ago), but before this it happened almost every day and sometimes several times in a day.

Another job off the list! Steve

*Now, call me an old fuddy duddy if you like, but like the oil pressure relief valve story that appeared in the Liege News recently, I could not help but think that this was yet another case of a new Reliant enthusiast having to re-invent the wheel so to speak. Have not we all long ago fitted the thick spacer gasket under the carb on our 850 powered Reliants? I will see if I can find the Reliant part number for the correct thickness of gasket, and check current availability. Ed.*

~.~.~.~.~.~.~.~.~

*Still on matters internetical, I see mention of a couple of LPG powered Kittens, that has to be the cheapest motoring on the planet, mind you, I don't know where they store the gas tank, just the 14kg in one case. So that is not too big, he claims 400km to a tank, must do the maths.*

Since I seem to be in daft mode this time, I found the following on the Jowett Jupiter web page which rather appealed :-

**Five Germans in an Audi Quattro arrive at the Italian border.**

**The Italian Customs agent stops them and tells them: "It's illegal to put 5 people in a Quattro."**

**"Vot do you mean it's illegal?", asks the German driver.**

**"Quattro means-a four", replies the Italian official.**

**"Qvattro is just ze name of ze automobile" the Germans retort unbelievably "Look at ze papers: zis car is desight to kerry 5 persons."**

**"You can't-a pull-a that-a one on-a me!", replies the Italian customs agent, "Quattro means-a four. You have-a five-a people in-a your car and you are therefore-a breaking the law."**

**The German driver replies angrily, "You idiot! Call your zupervisor over - I vant to speak to someone viz more intelligence!"**

**"Sorry" responds the Italian official, "He can't-a come. He's-a busy with two guys in a Fiat Uno."**

~.~.~.~.~.~.~.~.~

*Right, I may well have missed a couple of adverts out in my haste to get this edition finished, if I have, and yours is one of them, my apologies, please do make me aware so that I can rectify the omission next time. Ed.*

Hello Brian

28/4/05

Many thanks for advertising the Fox hardtop, it would have sold many times & the first to call me was Graham Spraggon who lives not too far away from you. He collected it yesterday, I remember many years ago when I had a similar enthusiasm for a project to embark on a long journey. Edinburgh to Doncaster.

I have also for sale the windows for the Fox driver & passenger doors which I should be pleased if you could find space to advertise them for me. I had a price of £20 in mind for the 4 off pieces of glass which are the original Triplex.

Once again many thanks. Regards David.

Brian, hello - in Mewsletter you asked (on behalf of someone in Gloucester) if anyone had a Kitten drivers' van seat. I've got two original van seats, stitching needs redoing and the odd patch maybe but the basic seats are reasonable I think. Pass on my number to the person if they are interested - I was only holding onto them in case of spares for repair if needed to my other Kitten seats but don't think I need them now.

regards, Philip Naylor - Baskewell, Derbyshire

~.~.~.~.~.~.~.~.~

## Sales and Wants

*For Sale :- 1977 Kitten van, tax & test Sept various spares including doors side window glass, front suspension, rack etc., tow bar fitted contact John Hutchings £395.*

Rod Sterry rang 17/4/05 to tell me that the Rebel is still available, good chassis. This is the one that Frank Haynes paid for but in the event could not take back to Chile with him – no room beside the two Kittens!

Free to a good home :- George Nicholas in Cheshire has a Kitten DL saloon which has been lying for a while, give him a ring if you can help re-home this one please.

Wanted :- A tow bar for a kitten, or even drawings for same. Contact Peter Swan.

## Epilogue

I posted just 265 copies of edition 63 today, Thursday the 15<sup>th</sup> of April, I had meant to post them all, but the queue in the Post Office was too big to let me do the foreign ones, and Graeme and Brian, and a few others, really needed personal notes, I know I shouldn't keep any back, but I sometimes do, and it just holds them up. Anyway, I allowed the Register to buy a new scanner / printer / copier last week, colour as well, an HP PSC2355p for those who know about these things, so I have compliments slips again, and was able to scan in Arthur Silby's article on the disc brake conversion on his Fox. All helps speed things up at this end.

And here we are into the middle of April, (I blame those racing commentators, I just love breaking some of life's little rules, and the joy of actually starting a sentence with a preposition – ahh, I can't tell you, but as I said, blame the racing commentators, you know the phrase "And they're off",) well before I am

taken off - and while I am still running on more cylinders than normal, I uncovered Alan Shaw's earlier drawings on the Kitten rear damper repair method. (I see they are dated almost exactly a year ago, one day I will get organised!) I really do not have any practical way of knowing what the scale will be. Alan did the drawings to that scale I love, you know the one, 12" to the foot. He even marked the original drawing as being to a scale of 1 to 1, but of course that was when it was an A4 page, and I will be having it reduced to put it in here, and do not know exactly by how much it will need to be reduced to fit the page comfortably. You get the gist – not easy this editing stuff you know! Then again, I will probably need to re-type the text to have it a readable size, could I leave the drawings full size – oh just get on with it Marshall! No, wait, as you will now have seen, I decided to go with Alan's more recent article on carb needle valves, and I will try and have the damper mounting repair article on the centre pages of the next edition, and so save reduction – well, it sounds like a plan to me.

Sadly and more than a little frustratingly the DVLA are taking a rather more serious view of Moira's operation than we had thought / been led to believe was appropriate, and it looks as though it will be almost Christmas before she is allowed to drive again, both frustrating and a bit worrying, but there we are. Does beg that old question, is a driving licence a right or a privilege? Just count your blessings.

Another frustration, this time one you just might be able to help me with, and that is do you happen to know, and more to the point have a current address for Kev Barker from Maidenhead? His last magazine was returned by the Royal Mail, marked "addressee has gone away" and, as far as I know, I have not had any change of address since he joined us in November. Kev was a member of the Surrey branch of the R.O.C., I should check with them – more work – anyway, if you happen to have any up to date info, I'd be delighted to hear from you. Come to that my last letter to our man in Chile was returned, but my Spanish is not up to understanding why! Frank, if you are reading this, I will try again, Ed.

Have a great summer, talk to you again in August.

**Brian**

*Resin  
Rockets*

Reliant engine tuning for economy or whizz, not quite halfshaft breaking torque, but optimising the Reliant 850 so that its full potential is achieved

—————<

Manifolds optimised  
Heads tuned, including attention to valves  
Carburettor gas flowed  
Rockets realigned and lightened

—————<

Also wiring bits all the funny coloured cables and crimps with electrical advice

Al Osborn 35 Griston Road, Watton, Thetford. IP25 6DN  
01953-884681 [WWW.AOservices.co.uk](http://WWW.AOservices.co.uk)

☺ ☺ Your Ad Could Appear Here!! ☺ ☺

*Contact the Registrar on 0141 886 6117 for details..*



# GRAHAM WALKER LIMITED



28 Bumpers Lane  
Sealand Road Ind Est  
CHESTER CH1 4LT



**RETAIL AND TRADE SUPPLIERS OF  
RELIANT PARTS WORLDWIDE  
ROBINS TO SCIMITARS**

**OVER 10,000 LINES STOCKED  
MAIL ORDER PARTS ARE OUR SPECIALITY  
NEXT DAY NATIONWIDE DELIVERY SERVICE**



**SHOP BY PHONE FOR FAST MAIL ORDER  
ORDERS RECEIVED BY 4.00PM WILL BE DISPATCHED  
SAME DAY**

**ALL MAJOR CREDIT CARDS ACCEPTED**

## TELEPHONE

**Mail Order: 01244 381777 - 7 Lines**

**Fax No: 01244 381262**

## OPEN

**Monday - Friday  
8.00 am - 6.00 pm**

**Saturday  
9.00 am - 1.00 pm**

**WEB : [www.grahamwalker.co.uk](http://www.grahamwalker.co.uk) E.Mail : [tracey.jones@grahamwalker.easynet.co.uk](mailto:tracey.jones@grahamwalker.easynet.co.uk)**

**COMPARE OUR PRICES, OUR QUALITY AND OUR SERVICE  
FULL WORKSHOP FACILITIES AVAILABLE**