

# *Reliant Kitten* *Register*

**NEWSLETTER 74**

**January - February 2007**



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.....

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# The Reliant Kitten Register

Rebel parts stock held by: - Adrian Hanwell

New Kitten / Fox / Rebel parts stock held by Brian Marshall

Rebel alternative parts list contact: John Blagburn,

Kitten alternative parts list contact: Situation vacant.

Fox alternative parts list contact: Duncan Bradford

Our Mutual Aid Spares scheme is run for us by Phil Hallam

Tempest Registrar: Martin Seymour 19 Cedar Court, Churchfields,

Mewsletter pictures – should be sent to John Pearce

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.

Web page:- <http://www.kitreg.org.uk/> or have a look at <http://www.reliantkitten.co.uk>

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# INDEX

Page 2	Contact details
Page 3	Index and cover story
Page 4	The Registrar speaks
Page 5	Rebel Round up, Tempest matter & Liege page
Page 6	Foxes Den
Page 7	Readers Letters from
Page 8	Steve Broomhall
Page 9	Allan Inwood &
Page 10	Malcolm Rush
Page 11	Tales
Page 12	from
Page 13	Tore
Page 14	resumed
Page 15	at last
Page 16	Dick Goodall
Page 17	brings us
Page 18	up to date.
Page 19	Getting Technical
Page 20	An 850 Fire Pump
Page 21	story by Steve Casey
Page 22	More on Heaters – the final word?
Page 23	from Duncan Bradford
Page 24	The FBHVC's AGM 2006
Page 25	More from the Net
Page 26	Sales and wants and the Epilogue

Hopefully you will see the new year begin, following a trend begun at the end of 2006, of an individual, as well as a car, being featured on our cover. All being well you will see the writer – see, he does sometimes wear a collar and tie! Sorry, Paul Wheatley from Shireoaks was not looking in the right direction when the lovely Moira pressed the shutter on the old 35mm camera. The car is of course “Little Lucy” as referred to in the last edition. One out of three must count for something! Thanks Paul for the hurl, it is not just our man in Tore who has had a run in a Liege last year!

## The Registrar speaks

A hopefully not too belated Happy New Year to you and yours.

Thanks to our man in Tore you have been, yet again, saved from a Brian's Diary article in this edition, thank you Dick.

Thanks too to the many who were good enough to respond positively to my request for early subscription renewal. If all goes to plan, your 2007 membership card will be enclosed, and if you do not have one in your envelope, then I am not aware of having received your subscription for this year, and your 'current member' flag will be set to 'N' before the next label print run, in other words this will be the last edition you will be getting unless I hear from you soon. Oh and a special thank you to Brian Millar for sorting the colour version of our cards out for us.

Not sure where to put this bit of info, I am advised that the Guild of Motor Endurance is organising its 2007 Sportscar Challenge, the Espana – Santiago run, a five day reliability Trial from 17th till 21st September 2007, someone kindly sent me a glossy entry form! If you are interested and have a spare £595 each for yourself and your co-driver (only that cheap if you book it before 1/5/07, £30 more each after that), Carol Bury is the girl you want to be in touch with, and you will find her at 10 Coronation Street (yes really) Evesham WR11 3DA.

I have to say that while I have been privileged enough to sit in the Dragoon, (must give Dudley a ring one of these days) the number of past entries (vehicle types) that are strangers to me is clearly an indication of my ignorance about certain motoring matters, Brightwheel, Buckland, Martin & Walker, Malone, Racecorp, Bellini and Duckshover to mention but a few! Oh and yes, the name Reliant is on the list too.

Those of that persuasion might care to have a look at [www.guildofmotorendurance.co.uk](http://www.guildofmotorendurance.co.uk)

**Brian.**

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## REBEL round up

Now I know that John Blagburn has some good news on the Rebel front, and Robert Fairfoull is trying to do interesting things with chassis number 00003, all this as well as Terry Horler's eagerly awaited update, but thanks to our man from Tore being back in touch, you will just need to be patient for now. Lots on Rebels next time, that's a promise.

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## Foxes Den

Dear Brian,

10.12.06

I thought Mewsletter readers may like to know of the latest goings on in Kent. I decided to up-grade the lights on my Fox, so purchased two halogen bulbs. These worked a treat for the first two night rides, and then failed just as I reached home on the third. I had remembered on my old three wheeler, which had the same switch, that this component was always rather

marginal even with lower wattage bulbs. I therefore fitted a pair of relays, and having cleaned up switch contacts etc., the system now works well. Purely subjectively, I believe the halogens to be rather brighter now they are connected through relays, so there must have been some considerable electrical resistance in the old system. So anyone thinking of upgrading would do well to consider fitting relays if not already fitted.

You may remember that I wrote some time ago about rebuilding the gearbox. This was not totally successful as second gear was always rather crunchy, especially in cold conditions. I had fitted new bulk rings and I expected these to wear in, and indeed this was to be the case, but second gear still was not right. Someone suggested that I tried semi-synthetic oil in the box, which I did and the problem disappeared, and the box works perfectly well. I couldn't understand why that was the case – it seemed counter intuitive to me as I had filled with much thinner oil and the box ran more smoothly. Fast forward now to an I. Mech. E. (my beloved proof reader tells me I need to spell that out – Institute of Mechanical Engineers) lunch and I found myself sitting next to my friend Ken who runs an environmental test department at a very large motor manufacturers, so I told him all about my gearbox (Ken is the perfect gentleman and always manages to keep a straight face when I ask a Reliant question) . He pointed out that they had done many tests on cold gearboxes and crunchiness, and it was his opinion that thin oil worked better because the layshaft, unencumbered by the drag from thick oil, didn't stop revolving as it passed through neutral, so the bulk ring had less to do. This seems to make perfect sense to me, especially when I think back that when I hurried the change from first to second, it went more smoothly. By being kind to it and easing into second slowly, I was doing exactly the wrong thing.

All the best, Jim Lugsden - Beckenham, Kent No. 241  
Matters Tempestuous

*I had a call from Steve Campbell in the middle of November to tell me that he had sold the business to John Melody from Scorton near Preston, so it is moving slowly north. John had rung me to talk about Tempests a couple of weeks previously, and in fact he is the chap who was selling the Salamander in the last edition. More news as we learn it.*

*Martin Seymour is the man to talk to about Tempests,*

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## **Liege Page**

John and Mel continue to produce Liege News to great effect, their 16th edition falling through the letterbox just in time for Christmas. On top of that a photograph arrived in the post which I hope to share with you soon – watch this space – or possibly a future front cover – oh, hang on, well done John Pearce, we got it on this one!

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## Readers Letters

### **Daddy's new car**

I'd been looking for a Kitten saloon for 6 months having decided that I wanted one for my next project before URB turned up on Ebay last month. My previous efforts, a 2.0 16v Mini then a home-brewed turbo Imp were long gone and I was ready for a new toy.

The car is a '77 with only 27,000 miles and was bought Mot'd and up and running although it hadn't been taxed for about 10 years so I was a bit apprehensive about driving it 120 miles home.

After convincing Mrs. B, and with AA card and mobile in pocket, we set off to bring my unseen (who said rash?) purchase home.

I was very pleased with the condition of her when we arrived, not mint but presentable with an excellent chassis and a good interior. Even Mrs. B commented that the car was quite cute, which was a right result as she'd described the photo of it on the Ebay listing as the ugliest thing she'd ever seen!

My 2½ year old could barely contain himself and insisted on travelling with me in the new car and so we set off home. Apart from a high idle all seemed well, the little car coping well with the traffic and after about 5 miles we joined the M6.

Almost immediately there was a whirring noise that sounded like the water pump bearing and the temperature gauge shot up so we pulled on to the hard shoulder. The bottom rad hose had gone so after a wait of a couple of hours I ended up coming home in a relay truck with URB on the back, bless the AA!

After a new hose from the local factors URB was running fine again and in its newly built garage ready to start being uprated. The plan is to fit a Yamaha R1 engine next year but for now it's sitting on new, black, 12 x 6 superlites (12 x 5 front) with Spax shocks, Rialto anti roll bar and decambered springs at the back, awaiting new bushes and coilovers at the front when I can get round to ordering them from Brian.

I have to say that I'm impressed with the design of the little car and the way it drove with 30 year old suspension was encouraging, I'm surprised they weren't more popular when new.

I'll keep you up to date with the car's progress and will send some photos when the suspension is finished.

Best regards, Steve. (Broomhall) - Sudbury November 2006

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Dear Brian,

11th December 2006

Well I had 3 almost immediate replies from my Yahoo groups posting all wanting to re-home the Kitten. I dealt with them in order of receipt. The first to apply was acting on behalf of a friend, he already owned Kitten he said and his mate wanted one as well. They duly collected the car on Saturday. I passed on the information about the Register although the chap who

already had a Kitten said he was aware of it but was not a member. In his next breath he asked where I knew of for the purchase of spares. I know you should not judge a book by it's cover, so I hope that the car will get the attention it deserves and it is put back on the road. I am a fine one to have doubts as to his intentions as I myself hardly made much progress during my keepership. As you may have guessed by now I won't be renewing my membership of the Register, but I will keep an eye out for Register vehicles and who knows what the future may hold. I shall continue to run my Scimitar GTC while Mr. Brown allows it. Thank you for the time you devote to the Register and may it and you live long and prosper. Goodbye for now.

Allan Inwood - Derbyshire No. 674

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Hi Brian,

Inver 10th Dec.'06

Hope you are all well. Most grateful for your networking in our Chile trip. Frank came booming in and rounded Lorna and I up.

He spent the day showing us round Santiago, culminating in a visit to his country club. A really kind guy he was up for a visit to car breakers / used parts dealers in search of that elusive 5 speed box for the Reliant. Unfortunately we had to move on to Panama.

Thanks for the pleasure that Mag has given me through 06.

Keep well, John (Dillon – the one with the Liege!) Inver No. 689

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Dear Brian,

December 2006

Update on things Kitten

As you may remember I wrote to you earlier this year regarding a pinking type noise on Kittens engine. Neither my mechanic Charles nor myself were convinced that it was pinking, as adjusting the timing made no difference. We decided that the best option was to get Kitten checked on a rolling road. Fortunately there is a small local garage that specializes in race and rally preparation, and they kindly agreed to put Kitten on their rolling road for me.

On arrival for my appointment the boss decided that we would first do a road test. His opinion after this was that although he thought it sounded like pinking, he didn't think it was. We then put Kitten onto the rolling road and he checked timing / mixture etc at various speeds, which were all OK.

He used various listening devices to listen to various parts of the engine whilst under load. After doing this he changed his mind and decided that it was pinking. He then removed the spark plugs and looked into the engine using an endoscope, which revealed only deposits in the combustion chamber, and in his opinion they could become red hot and cause the pinking. This on an engine that has only covered 3000 miles since rebuild. He suggested that if I dribbled RedEx down into the carb, as this could well clean the deposits.



With this information I went back to Charles. After some thought we decided that although this might cure the symptoms it wouldn't cure the cause, and as the engine had also started to rattle on start up we decided to remove the head and sump.

On taking the head off we found that the probable cause of the oily deposits in the combustion chamber was that when the engineering firm did the head conversion to unleaded, they failed to replace the valve stem oil seals. We also discovered that the head gasket we were supplied with was a standard one, and not the thicker one for use when the head had been skimmed.

I should add at this stage Charles had never worked on a Reliant engine before so it has been a sharp learning curve for both of us.

On removing the sump we checked the big ends for the cause of the start up rattle and found all four were badly worn. These had been replaced when the crank was reground during the engine rebuild.

The only reasons we can think of for this failure are, either the new oil pump fitted during the rebuild, which later proved to be faulty, had caused damage before it was replaced, or the compression, at 170, was too high leading to the damage to the big ends. We wondered what difference the thickness of the head gasket would make to this figure. We will check again at 500 miles when the head is tightened down. Charles did contact John Calthorpe at Rossefield Motors, who informed him that in the past they have had to machine out the combustion chamber in the head to reduce compression in order to overcome pinking.

All the above work has now been carried out and Kitten has now done 400 miles so I am hoping that this will cure all the rattles.

Well I think that's all for now and any comments you, or any of our technical readers can make on the above would be much appreciated.

Take care for now, and all the best for Christmas & New Year.

Malcolm Rush - Whitchurch No. 352

*Malcolm, many thanks for the update. A couple of thoughts, at 170 the compression is barely up to scratch, I would be looking for a figure of between 180 to 220 on a good engine, (having said that I have always maintained that it is more important that they are all either the same, or very similar, than that they be a particular figure) however I can assure you that at 170, the bearing wear is not down to excessive compression. Also, not wishing to spell doom and disaster, but I am pretty certain that it is the mains that wear worst in the Reliant engine, even though they increased the journal diameter when they increased the stroke to make the 750cc engine up to 848, or 850 as we all call it these days, it was still the mains that wore out first, in spite of the larger journal diameter (and hence larger bearing area). So if your big ends were bad, I suspect that the mains will be even worse I'm afraid. (The frustrating point being that, unless you are a much cleverer man than I, you can't change all three of them without taking the engine out). Having said that, here is the bit of my memory that does still work reliably coming into play, in 1958, when I was 6, my dad bought his first car, a then 6 year old Jowett Javelin, it had been the company car of a local insurance rep, had been thrashed, and had just had an engine overhaul – it ran its big ends in a week, (days before our first car holiday) this in spite of dad being gentle with it because he knew it was 'running in'. The problem(s) were, he had a terrible job dismantling the engine, 'they' had put it together using brown Hermetite instead of red, anyway, the problem was they had reground and re hardened*



*the crank, (the Jowett had a nitrided crankshaft), but had fitted standard size shells instead of ones to match the re-ground shaft, (I can't remember if it was 10 or 20 thou they had taken off it). The point being, could that be your problem? That said, if the oil pump was suspect, then I think you know your answer, but that does not auger well for the state of the mains (or the camshaft or any of the other internal bearing surfaces like valve stems). That said, a free spinning engine is no bad thing. The old adage, "if 'taint broke, don't fix it" springs to mind.*

*What you didn't mention – assuming they did it when you had the car on the rolling road – is what the b.h.p. figure at the back wheels was - I am sure we would all love to know – perhaps we should run a competition, my guess would be 23. I would normally hope for 27 or 8, but not with just 170 compression!*

*Right, that's more than enough from me, anyone else have any relevant thoughts? Ed.*

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## **Tales from Tore**

Dear Brian,

October 2006

This week has not been the most inspiring car-wise; in fact it has been downright frustrating. Last weekend I settled down to some work in preparation for the MOT. Incidentally a new handbrake cable had been fitted 3 weeks before, just as well for it proved to be fraying at the quadrant bends. The main job was to replace the steering rack with a rebuilt one. Being of a nervous disposition I did remove the radiator to keep it out of harm's way. All went reasonably according to plan until I had fitted the 'new' unit and then screwed on the track rod ends from Unipart. Oh they fitted, but luckily I did not straight away tighten everything. Even with the track rod ends screwed right down as far as possible the wheels were definitely pointing outwards at the front. Why? Then I thought of comparing the old and new ones to find that the new ones are about a quarter inch longer, which explains the problem. Luckily by holding the track rod with a Mole wrench and screwing a die down each track rod it was possible to increase the length of thread so that problem was overcome.

I happened to look at the fan belt and it looked a bit loose. So I lifted the alternator to see if the sliding link was loose. OOPS! The engine lifted up, obviously the engine mounting was gone. There seemed nothing for it but to remove the alternator (I've never managed to replace a nearside engine mounting otherwise) and get on with it. Then of course the exhaust had to be taken off the manifold to let the engine/gearbox unit to tilt. And I had to remove the home-made bracket from bell housing to exhaust. Now in a past Mewsletter I recall someone wittering on about the necessity of painting exhaust clamps. (*Who, me? Ed!*) When I fitted this clamp two years ago I had dutifully coated it with smooth Hammerite, and at the time it looked quite smart, but now I found just a very rusty clamp. As I have always maintained, high temperatures burn paint off exhaust front pipes and fittings. So there! Once the engine was jacked up with a bit of floor board between the sump and the jack, the old mounting came off easily for once. After the usual hunt in the attic I found my hoard of engine mounts and two were fitted. Might as well renew both while I was at it.

So far so good. Then I looked at the oily mess round the front of the engine caused by a leaking oil seal at the crankshaft pulley and it looked even more disgusting than I had recalled. I thought that a timing cover oil seal was in my stock and the loft was again raided with a positive result. Of course the water pump had to come off before the timing cover,

unless some genius can find a better method. So, eventually, I got the timing cover off to find that the old seal was of an ancient type having a steel outer which I imagined would be stuck. I recalled the dodge of using a big socket to tap out old oil seals but the alloy cover looked a bit vulnerable to use much force. A piece of wood was cut, a bit smaller in plan than the inside of the cover and a bit thicker than the depth of the cover. Then, with a hole saw, a circular hole just bigger than the outside of the oil seal was cut at a suitable place. So when the cover was placed over the wood, it was supported round the oil seal aperture. With a large socket and a copper mallet I tapped away at the oil seal, gently at first then a little harder, to no effect. Hmm I seem to have been in this situation before!

Whenever I come to an apparent dead end I find a cup of coffee is a good idea and so it proved. For while mine ancient brain was pondering I bethought myself of our esteemed Registrar and did indeed make telephonic contact with him. Verily e-mail is a wondrous thing but mine ancient computer hath thrown a wobbly and will no longer co-operate. Besides which the mellifluous tone of a human voice was in truth much to be preferred. Brian suggested that heat might do the trick and so I popped the cover into a steel pail, poured on a couple of kettles of boiling water, and left it for a few minutes. Having retrieved the hot cover with a pair of kitchen tongs, don't tell the wife I borrowed them, the oil seal was soon tapped out. Luckily the new seal was of rubbery construction throughout and went in easily. By this time it was dark so operations were suspended.

Sunday may be a day of rest for some, but for those of us with old cars, needs must get on. A timing cover gasket and a new chain tensioner came to hand, yes I had intended to do the job earlier, about 2 years ago I think. I always find that gaskets are fragile and tear easily, and so I attached the gasket to the cover with contact adhesive. And to make sure of a good joint I borrowed a tube of Hylomar' from Mike next door. Then I went on to fit the water pump, again with a new gasket. My goodness, I'm reasonably organised for once. Many indeed have been the times when I have needed to make gaskets from cereal packets. Refitting the alternator was the usual pain with regard to the pivot bolts. Yes Duncan Bradford I do recall your words of wisdom with regard to cutting away a piece of the body side to provide better access 'a la Scimitar' but I was hoping to get the car back on the road without spending too much time on mods. For various reasons, including Sunday dinner, that was as far as I progressed.

Luckily Monday dawned dry and so on with the motley. After the usual fiddle with the side angle bolts the radiator went in and the water hoses were replaced. This Kitty seems to have a bigger space than usual between the thermostat housing hose stub and the one on the radiator, which makes getting the top hose leak tight a little problematic. A while ago I bought a Morris Minor top hose thinking it would be longer and so help. Well it was longer right enough, but there are 3, not 2, corrugations in the Minor hose, and it was so stiff that it would not compress enough to fit. Some I win, some I lose... Perhaps a length of convoluted hose would work in a future mod attempt? The old coolant was re-used after straining through a pair of the wife's old tights then the exhaust was replaced. I seemed to be winning so the engine was started, only to show that the exhaust was blowing. I remade the joint twice with no success, what could be the problem? Yes I had used a new gasket after removing the old one. Isn't it awkward working at a hidden surface by using a mirror? And I was NOT going to use that disgusting exhaust paste. One snag was that there was one stud and one bolt to fasten the joint and the bolt was a pig to fit. A search through an old toolbox found a likely looking stud; it must be about 40 years since I bought it for some job I cannot recall, and not on a Reliant. Then I fitted the stud. Ah yes, here's a hint for the few of you who haven't done this, lock two nuts onto the outer end of the stud and then it can be screwed firmly into place with a spanner and the nuts removed afterwards. And still the joint leaked, at which point I realised

that the unthreaded part of the stud was a bit too long. So a couple of washers placed under the nut packed it out and allowed a better clamping action, which did prove to seal the joint.

At this point I rather unwisely thought that I had cracked it, and left the engine running to get up to running temperature. After packing my tools away I turned round to find a cloud of steam arising. 'Oh dear' and other words came to mind. Yes I know that steam often forms due to spillage of coolant on parts that heat up, but this was really excessive. My inspection caused more 'oh dears', for the radiator was blowing off like a steam locomotive. For some time I had wondered about an occasional loss of coolant and the fragile radiator must have succumbed to removal stresses. It was almost dark so I packed up for the day.

Now it was Tuesday, and the fourth day of work. What would be the best and cheapest course of action? I had a spare radiator, though of the Mini type rather than the existing Reliant one. Perhaps I could fit it complete with its own side angles and adapter plates to avoid the fiddle with tiny fitting screws? But of course on the spare radiator's mounting angles, two screws which should be welded in place on one angle iron support, were loose. I have never yet managed to hold the screws under the bonnet while fitting nuts underneath for mine arms are of greatly insufficient length. Of course there was no welder available, though considering the chicken droppings usually resulting from my welding attempts perhaps that was no bad thing. So I made sheet metal screw retaining plates and fitted them with pop rivets, surely the most useful inventions for any DIY addict. Now it 'only' remained to remove the leaky radiator. Here things went pear shaped, because the 4 screws to the body had nuts stuck solid. 'Ole man rust' is alive and well folks. After liberal applications of some old-fashioned graphited penetrating oil (where can I buy some more?) 2 nuts came off. Then a 3rd succumbed after I had cut its screw short to avoid winding the nut over two inches of protruding screw. This was the lower driver's side one, cunningly positioned at the back of a blind recess, and posed a problem of access for the junior hacksaw and my arm without removing the road wheel. Never fear, I found a long slim wooden batten and screwed the hacksaw to it and so was able to work from a distance. However the top offside screw posed real problems. By using a battery powered drill and a grinding wheel its I-o-o-ong bolt was shortened but the nut would not budge. Hacksawing down the side of the nut had no effect. And then came the night to stop the fun.

After this excellent summer I have long been expecting rain to arrive and it did, for Wednesday was a washout. Thursday's weather was a little better and I did grind a little more off the last bolt between showers. Here I have to express my disappointment with the power drill's battery. Unless charged up immediately before use it seems to retain little power and it ran down quickly but heavy rain returned so it made no difference. After dinner I did some rooting about in my boxes of 'useful junk' and found a spare but defunct drill battery and some electric cable. So I set about a little mod of my own and now have a battery case with a long cable, which can be attached to a car battery. I just KNEW that buying a 12-volt drill would be a good idea. This should give a long battery life for future abrasive efforts, hopefully tomorrow, though the weather forecast is not good.

I can only hope that the other radiator turns out to be sound after all this effort!

All this nonsense means that the MOT I intended this week never happened and it has run out. So Kitty was confined to barracks. Not that it worries me because one advantage of my antiquity is that I now have my free Scottish bus pass! The buses run every 20 minutes from near home to both towns. But mine good lady doth wish to have 'her' personal hansom cab available as she requireth. Hard luck chuck!

I had an unexpected visit from John Dillon at Wednesday lunchtime. He had taken his Liege for some official inspection or other and couldn't resist showing it off to me on his way home. In the pouring rain I duly admired it, the finish is really good and the Liege is a great wee beastie. The engine accessibility is better than a Kitten. I had a wee passenger run up to the farm and back and I can see the attraction of these cars, must buy a Lotto ticket this week...

It's Sunday 22nd October now. The weather relented at last yesterday. The dodge of using the car battery powered drill to grind off the stuck screw worked well. Once the working surface reached the top of the mangled nut it was then possible to centre pop the bolt and drill down it to remove the nut. It didn't take long to remove the good-looking but leaky radiator and replace it with the grotty looking one, which luckily proved to be sound when the engine got hot. You may imagine the amount of copper grease that I put on the radiator bolts in an attempt to avoid so much work next time. After which I cleaned out and adjusted the brakes.

Having booked the MOT test for Wednesday 25th October I had a rethink about the amount of free play on the handbrake travel, because the new cable fitted 4 weeks ago has stretched. We all know where the Kitten handbrake adjusters are buried don't we, oh dear. So there was only one course of action and that was to get all 4 wheels up on car ramps so I could get underneath. On this Kitty there is just enough room to wiggle spanners past the propshaft and adjust the cable. Other specimens of these wee beasts, which I have owned, possessed the annoying property of needing the propshaft dropped at the rear to provide working space. Methinks a wee redesign of the cable and routing would be beneficial. While the car was elevated I took the opportunity to check oil levels in the gearbox and back axle.

Tuesday was a washout weather-wise, Wednesday has been dry if dull. With bleary eyes I drove to town for a 9 a.m. appointment, being careful not to arrive too early, I know the MOT station's liking by now. The usual tester recognised both myself and the car, and a gentle smile crossed his face. I wonder why? I settled down to read the local paper and in due course he returned. To my surprise, astonishment, incredulity or what you will, it had passed. This makes 2 years in a row! His only comment was that the front brakes were a wee bit out of balance. 'But it won't matter, for you don't drive very fast'.

Though I had done the MOT preparation, my efforts are only a small part of the reason for success. Without the sterling work of the last owner (Brian Millar), and Alan Shaw's capable assistance both by Mewsletter articles on steering rack overhaul. and supply of ball races, I would have been struggling to say the least. Thanks lads!

With the MOT test out of the way, and feeling rather elated, I visited my usual tyre depot where the front wheel tracking was adjusted. It wasn't as badly out as I had feared, but doing the job set my mind at rest in that department at least. Finally the leaky radiator was dropped off at a local repairer, where the lads were quite interested in Kitty. One said 'The engine smells just like my motorbike.' Could that leak oil too?

It only remains for the steering wheel to be set straight and the indicator-cancelling cam to be repositioned for this batch of jobs to be complete. Though the 'To Do' list has more. This seems a normal situation?

This missive is much longer than I had intended so I will close by wishing all the best to you and Moira.

Yours Faithfully, Dick Goodall.

P.S. Today 2nd November, and small sister's birthday though that's of no great interest to you, I went to collect the radiator. 'It should be OK now' he said. 'What's the bill?' I enquired. 'Ach forget it. It was just a wee job - I didn't argue!

It's 3rd November and the saga rolls along. The radiator is losing coolant and I can't see any obvious reason. So I hunted round town for a new radiator cap as this cured things on another car years ago. Two motor factors were no help and I ended up at Halfords where I bought a HRC 604 cap, which has the correct 7lb rating. Time alone will tell if it works...

6th November 2006. After a few more days the coolant loss continued. I suspected the water pump gasket and gently tightened the securing bolts but to no avail, it appears the water pump is on its way out. So I phoned the ever-helpful Dennis at Michaels of Selby (01757 270002) for help. It arrived next day, thanks Dennis! If the weather would co-operate as well as my parts supplier, then the new pump would be fitted, but this is November in the North of Scotland.

As an aside, I have been meaning to fit (as in Foxes I believe) the insulating spacer between carburettor and the heated water jacket to reduce fuel vapourisation problems. Dennis was able to not only supply the spacer but also the longer studs needed for this mod so now you know. Again all I need is good weather....

Sunday 12th November 2006. Saturday saw gales and showers of rain, sleet and hail. How lively... Today has been very quiet weather-wise and I changed the water pump and fitted the renovated radiator. I took the opportunity to renew the heater hoses too. Which leads to a wee story. I could not find a motor factor etc. which stocks ½" heater hose. How things change. They all seem used to specially shaped hoses for everything under a car bonnet these days. So I ended up at a hose specialist on a Saturday morning when they have a bit more time to talk. The counter hand seemed quite vague, maybe a good night out on Friday or am I cynical? He struggled with my request for a couple of meters of hose and consulted a guy outside then managed to find some. 'OK, great' I said. 'What do I owe you.' 'Er hang on a minute' came the reply and he dashed outside again to consult his mentor. The other guy looked resigned at the query, then looked at both the car and me, and a grin came across his face. In came the counter hand again. 'It's a couple of quid' he said. Well that must be a bargain so I handed over a 'gong', expressed my thanks and exited stage left P.D.Q.

To return to the real tale. After all had been reassembled and the system filled with new coolant, the engine was started and allowed to heat up. After the Kenlowe fan had cut in and out for half a dozen times I stopped the engine and checked the coolant level, which was still as I had hoped. Perhaps, just perhaps, this saga has come to a successful conclusion? I can but hope.

TTFN, #157

*Dick, many thanks. Sorry that you are not back on-line yet, but at least the word processor is up and running again, and clearly your typing finger is still in good order. At some 4,000 words or thereby you have managed to save everyone from a Brian's diary article for another issue, well done! Good news about the MOT, hopefully next year's will not involve you in so much time and effort. Ed.*

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Hi Brian,

26/10/06

Further to the item on Mewsletter 72 I thought it worth mentioning that Stafford Vehicle Components do all the bits you might need, wheel boxes, nice chrome bits for through scuttle, motors, drive cables etc.

Reason I know is that I gave up looking for decent Austin Allegro parts for Liege and bought them from SVC. This might also be of interest in your Liege section of mag. Their number is 08456 581251 and or the site you want is [www.s-v-c.co.uk](http://www.s-v-c.co.uk), well worth a browse, went there just to check it was still in business and spent next hour, gallery is well worth a look and reminded me that I nearly ordered a Sylva Striker.

Got a letter from Peter (Davis) this morning with the note I needed for DVLA, set out for Inverness with high hopes of completing the paper trail, only to discover that all roads were blocked due to flooding.

On the windscreen wiping front, only had to buy the mechanicals, the donor Robin provided the 2spd self parking motor, but the Liege has two wipers and of course the Rialto only one. Think it was a favourite of Peter's too because the headlights, other lighting and radiator cooling fan look very familiar. Also bought the seat belts there now I come to think about it.

Keep well Brian, John (Dillon) Inver

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## **Getting Technical**, *again* 24th Nov. 06

Although Martin (page 22 Sept / Oct edition) has probably moved on with his wiper parking switch, I think a few words won't go amiss.

The Lucas wiper motor has a white plastic parking switch that clips into the body, but to do this on the car you have to lie in the passenger footwell, very uncomfortable! The switch then has two (or three sometimes) wires from it that plug into the switch. The third wire, if fitted, allows access to a third brush in the motor, hence giving a slightly faster speed. You have to arrange your own dashboard switch. These were fitted to the Rialto I think. But to fit it up you can modify a single speed wiper motor provided you have the extra brush holder. Now when it comes to fitting this switch block to the motor (as you lie on your back!) you will find very much easier to fit if the parking stud on the switch doesn't foul the mechanism in the motor. To arrange this – operate the wipers, then, at mid screen, switch the ignition off, hence leaving the wipers mid screen – the mechanism will then be out of the way of the switch.

Now as regards to the wiper boxes, I have several of these as spares, they aren't in wonderful condition, but they won't cost you a lot of money. A good clean and grease up should get them in use again. Bear in mind that there are two of them with different ratios! When they were available they cost an arm and a leg as well.

I still have a small amount of Kitty parts, mostly engine, some new, plenty of cylinder heads, cams, manifolds, even a believed brand new Rebel exhaust manifold! Wiper and door mechanisms, so ask me for a list, or come and fill a bag!

Al Osborn, Watton Thetford [www.AAAOservices.co.uk](http://www.AAAOservices.co.uk)

Still in Technical mode, John Whitfield tells me his Fox passed its MOT, good news John, what is not so good is the news that he is having difficulty fitting a new spring I supplied. Now this gives me an opportunity to try and communicate effectively with everyone. The new dampers and springs which the Register has in stock are each made by a different company. The dampers by a damper manufacturer, and the springs by a spring manufacturer. The spring maker knows whose dampers we use, and makes our front coil springs to the same spec, so they fit beautifully. They also fit easily, because the new dampers have adjustable spring seats, you can literally fit the springs with your bare hands, I know, I used to do it for packing them up together prior to sending them out. Duncan Bradford holds the stock of these for us now, and so he now does that, thank you Duncan. What you need to do is all covered in the instructions that come with them to get the ride height you want. However, I have learnt over the past year, that trying to save a few pounds and only buy new dampers, will give problems, because while the new dampers and springs match, they are not the same as the original ones, the original springs are very slightly smaller in diameter, the internal diameter being almost 2mm less, and so the old springs will not fit onto the spring collets of the new dampers. One owner simply put the collets on his lathe and machined 2mm off the relevant face, but that destroys the anodized coating. Another tried to file more than just the rust off the inside of his old springs to make them fit, but spring steel is pretty hard stuff, and to so weaken a spring that is already most likely a quarter of a century old has to be questionable. The moral of the story is simply to renew the dampers and springs in sets.

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## **850 Fire Pump Motor**

There was some talk in "Reliant circles" some time ago about a newly found (or in fact a re-discovered) source of low mileage 850 motors. It was said that a cache of portable fire pumps had been found that used "our" motor as the power source. Nothing came of this until one day; I found one of these pumps on e-bay.

I had started the restoration of a Kitten van that had seen a lot of neglect and was missing its engine. I thought I'd take a risk and make a bid. There was very little other interest in the auction, and I ended up waiting for a fire pump to be delivered to me on a pallet. The total cost was just a little over £100 all in.

The pallet arrived and the driver and I had a devil of a job getting it off the back of the lorry. The penny soon dropped... "These are supposed to be portable, aren't they?" We removed the plastic wrapping and found four fold out handles that made the whole thing into some kind of stretcher like device. The distance from lorry to garage was easily covered!

There it sat for a month or so until I got around to the disassembly. Instead of a gearbox there was a bell housing with two hose connections and a large pump. This was removed to show the flywheel with a friction plate bolted directly to it. The starter motor was pre-engaged, and the flywheel (starter gear ring) teeth straight cut. (All Reliant engines have been so equipped since about 1984 – Ed.) There was a plate with a number of gauges that had to be disconnected. One of them showed that the motor had done 55 hours work. If this was true, then at 70 mph that equates to 3850 miles!

After separating the motor from its frame, a trip to the tip took away pump and bellhousing (I just hope that the fire pump preservation society are not reading this!) slab sided fuel tank, damaged alternator, cooling system, and most of the hoses and the tubular frame. I kept the base to support the motor as I worked on it.



There were one or two bits and pieces missing as this pump was probably used as a donor for others. Nothing important had gone apart from the alternator which had been replaced by the damaged one.

As I dug deeper into the engine I found a very clean interior with only a little browning to the tops of the pistons. The oil was brown rather than the customary black, and the timing chain and gears were spotless. The 55 hours looked believable!

In re-commissioning the engine there are a number of parts that need replacing, so a spare motor is very useful. The thermostat was a 74 degree item rather than an 82. The thermostat housing does not have the cranked top (could this be a Rebel one – do you still have it Steve?) The water pump has only one small vertical pipe. The other has been removed and the hole tapped for a sensor. The water heated section of the inlet manifold has two through bolts inserted where the waterways would be to take a bracket. This needs replacing. A clutch needs fitting. On dismantling the distributor, I found it had electronic ignition. I guess this could be kept, but I prefer the predictability of points and condenser (bad experiences of electronic ignition in the past!).

In summary the extra parts that you cannot do without are :-

Clutch cover and friction plate.

Thermostat housing.

Water pump.

Water heated section of inlet manifold.

Crank pulley bolt (an Allen type fastener holds an extra pulley on here).

I am in the middle of putting it all back together, but am very hopeful that there are a lot more miles that can be squeezed out of it. It's certainly a lot cheaper than reconditioning. The last motor I built that way cost nearly £500!

Finally, if you see one of these pumps for sale, it could really save some time and money. After only fifty five hours of work, I reckon mine's nicely run in!

Happy Kittenning.

Steve Casey - Nuneaton Warwickshire No. 772

*Thanks Steve, I am sure others will have a different take on the electronic ignition, and I am pretty sure that the fire pump engine's have a different camshaft and compression ratio, and possibly a considerably heavier flywheel as well as different jetting in the carb, but yes, there are some well maintained low mileage examples like that out there. This memory of mine prevents me from quoting which page of which previous issue we have published a similar story in, Dick's index could no doubt help anyone interested out. Ed.*

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## **Parts supply / Heater solution?**

Thoughts on the latest Mewsletter:

Further to the Fox / Kitten heater debate, I was talking to John Box recently about this and he said something along the lines of: "You do know that the adaptor in the head for the

heater supply hose can screw in so deeply that it can bottom on the inside of the head casting and really reduce the flow?" Needless to say, this was something I'd never considered. He went on to explain that ideally the adapter needs a shorter thread, and this is easily achieved by cutting it shorter, after ascertaining the minimum length required to fix it firmly into the head. I suppose few of us ever have cause to remove these, and they are not the easiest things to look down, but evidently the internal shape of the head casting means that if the adapter is screwed fully home it ends up so close to the opposite face of the 'water jacket' that its opening is pretty well blocked off in many heads.

The downside of this information was that it wouldn't apply in the case of my red Fox, whose engine John assembled! I can report however that swapping the blower motor with one from an MGB, which drops straight in place, has resulted in the feeble breath of warm air becoming a trouser-leg ruffling hot blast! This motor, and the one used in many of the larger BMC products of the 50's and 60's is similar to the cheapie version used in Reliants, but is taller and much beefier. If you have deep enough pockets for a new one, they are supplied as a Scimitar upgrade by Queensbury Road Garage [01536 513351].

Brian I think the money from the Spares Fund is unquestionably money well spent - and if you really wonder what to order next time there is a surplus, if ever, it could be worth investigating the demand for Fox door frames. It seems hardly a week goes by without somebody mentioning them to me, in fact 5 in the last week. It is certainly the commonest cause of Foxes being scrapped, apart from the historic need by Tempest-builders and others for the Fox axle. The 6 sets I had made in stainless some years ago prove that it can be done, but it is very time-consuming due to the enormous amount of accurate tight folds, and the need for absolute accuracy in the measuring, cutting and welding of so many awkward angles. Once made and fitted however, they extend the Fox's life towards infinity and were well worth the £260 per set. Can anyone make them for that sort of price now?

Speaking of money well spent, my membership renewal along with my amended vehicle details, is on the way to you as I type. Many thanks Brian for another year's help, information, entertainment and sheer hard work.

Duncan Bradford - Norfolk No. 46

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## **Federation of British Historic Vehicle Clubs AGM**

The 19th Federation was again held at Paulesbury near Towcester in October. Once again the minutes of last year's AGM, Accounts and the re-election of the committee went ahead with their usual aplomb. They are 'trading' with a turnover of just over £90k with a profit of £10k, so all appears to be well at base. This year they are proposing to revise their constitution. At the moment there is both a committee and a board of directors, although the members are the same. This also has the effect that members are voted to the committee that have some specific vehicle knowledge, but this does not say anything about them having specific skills to run the organisation. The committee is recommending that new articles of association and bylaws are drafted for this.

It is intended to have a new board that will be responsible for setting up sub-committees and working groups.

Some of the work of the Federation has been to meet with the Minister of Transport recently to discuss some of the points we are concerned about. MOT retest fees, DVLA's fees, Status of SORN, Continuous insurance, Waste management, daytime running lamps (DRL) Not being applicable to Historic Vehicles. Motorcycle MOT test fees having been put up by 74% in the past 12 months being a point of concern.

Another area of concern is with regard to the intended use of electronic registering of vehicles using tolls (bridges, tunnels). This system needs to be Europe compatible, but the question is, could this system expand to all vehicles? Hence road tax disappears and we are charged for road usage! The question then arises what if your vehicle is 6v, or perhaps doesn't even have electricity?

The autumn of 2005 saw the Federation initiate a survey, we all had a form to fill in and return, of the economic and social value of the historic vehicle in Europe. This has now been published, anyone interested may see the results and further information about the Federation at their web site [www.fbhvc.co.uk](http://www.fbhvc.co.uk)

There is a further whole raft (modern trendy computer speak!) of other areas that the federation concerns itself about on our behalf, to try and make sure that we can continue to use our vehicles despite fiddling of the laws by those with nothing else better to do. It would seem to me that years ago we had motoring vehicle legislation that went on for years untouched and working reasonably well, but these days there is constant fiddling with legislation, sometimes just for the sake of it, other times because the last change had not been properly thought through (and at what expense?). What is the Historic vehicle movement's contribution to pollution and road safety? Very little in the scheme of things, so why this attempt at heavy handed legislation? The Federation might be able to help us with an answer.

Alan Osborn - October 2006 No. 295

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

Hi Dunc,

It was something that was bugging me for ages on my Rialto, went through 3 sets of dampers in 18 months so eventually decided on the shocks. (the Rialto has now been sold to a good home).

Now I know what difference they made, when my Jimp is eventually on the road I will be fitting something similar as the leafsprings are banked together similar to a Fox.

There are three things to consider,

1 is the amount of springing already built into the Fox.

2 is the damping of the springs.

3 is the stability of the rear axle

By using the coil overs instead of the original dampers, this will alleviate any problems with No's 2 and 3, With No1, as the Fox is already over sprung then you could go for a lighter weight shock designed for a smaller Motorcycle, but I personally would still go with a 400cc shock as M/c shocks don't carry much weight on a bike, just the occasional pillion so the spring

shouldn't increase the tramping affect to much, however motorcycle dampers, normally, are designed with a higher damping rate to help keep the back wheel on the ground and the pillion comfortable. So should provide a lot better damping rate than Reliant or Mini Dampers.

Another more expensive solution is to opt for Air shocks, these use standard shreader valves and are infinitely adjustable, extend the air valve with some pipe or hose to a convenient place, say inside the boot then when carrying heavy loads, a quick pump with a bicycle type pump will compensate and release some pressure when running empty. Oh by the way, the Boge dampers are part no BOGE 27 - 030 - G.

Good luck on your quest for a damp rear! Johnno

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## **Sales and Wants**

For Sale :- Kitten estate LFT 662X. Off the road but running, this was a really good one, and still has a really good engine. Ring Ken Stallard for details, South Wales

For Sale :- A very rare opportunity to own a unique piece of motoring history, the Bobcat is on the market. John no longer has the room, and so it is looking for a new custodian. See the front cover of edition 56 for a picture This was Robert Box's solution to making a Kitten do 100mph, and boy does it look good. Contact John Pearce for details

For Sale :- 5 Fox wheels with tyres, 2 new, 2 almost new 1 half worn. 155/12 £20 plus carriage or buyer collects. Contact Silby, St. Ives, Cornwall

For sale :- Reliant Fox van. Not used for some years, wants an MOT. Still starts and runs. £350 Jim Lambert Hull.

Wanted :- Jason Briggs (& Nicola) need Kitten seats and all window rubbers

Wanted :- Les Gill from Merseyside is looking for a 12" or 13" wiper arm,

Wanted :- Mike Philips is in need of a Kitten Air filter casing, now I really can't remember, and with the passage of time people change things, were there a number of different air filters fitted to the Kitten during its production life? Whatever Mike needs what I think is the original Kitten one, the simple clip on top with the intake at right angles to the carb body. If you have a spare one lying about. Please give Mike a ring

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## **Epilogue**

Well here we are again, not yet Christmas, and thanks to your input here I am on the last page. My thanks to those responsible.

Renewal notices, many with articles you will find both in this edition and the next, are vying with Christmas cards for superiority of numbers in our poor Postman's sack at the moment. My thanks to those of you who responded so quickly to my request for prompt renewal.

I've just realised the full story about the new postal charges, we have room for more pages in the envelope – but too late for this edition!

Till next time take care, may you have happy and trouble free motoring, and don't forget to use that grease gun. Oh, and a very Happy New Year to you from Moira too. (My favourite proof reader).

*Brian*

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