



Reliant Kitten Register

NEWSLETTER 88

May - June 2009



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

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

☎ 0141 886 6117 Fax 0141 561 5430



The Reliant Kitten Register

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: ****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

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.

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.

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

Dinky Cars

RELIANT SPECIALIST

Wennington Marsh Farm, Wennington Road

Rainham Essex RM13 9EE

Tel: 07958 246891

**SALES, SPARES, REPAIRS,
ENGINE RECONDITIONING**

INDEX

Page 2	Contact details
Page 3	Index and cover story
Pages 4 & 5	The Registrar speaks
Pages 6 & 7	Rebel matters & Rebellious Conduct – part 16
Page 8	Foxes den
Pages 9 & 10	Tempest news – I did it My Way - update
Page 11	Words of wisdom from stable Cottage
Page 12	You quoted me incorrectly Brian!– Harry Darby
Pages 13 – 15	40+ uses for WD40
Pages 16 – 18	“Tom Kitten” by Lyn Rodden
Page 19	Us
Pages 20 – 26	Getting Technical
Page 27	The government’s scrappage scheme – FBHVC
Page 27	Parts
Page 28	Sales & Wants
Page 29	Epilogue

This time we have decided to go with a Kitten from the past, you had a black and white preview of this one last time, and while it does not achieve the picture quality we aspire to these days, came up well enough I thought. It does clearly remind us just how much clearance there was above the wheels when they were new!

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

Striking the proverbial happy medium can be difficult, especially for one who has never attended a seance! It does however occur to me that while I have no objection to a bit of wit, to devote more than a page or so in a publication such as this could be seen as a tad excessive.

What with the recent increase of over 10% in postage charges, and the ever present need to control costs generally, I ought to exercise some restraint. Better I believe, to give you less but better quality, than fill pages with too much nonsense. That said the WD 40 story might creep in.... Oh, did we do that before?

Well, that is the feeling of the moment at any rate. So the pendulum will swing towards a more central position – I hope! Feel free to comment.

Mention of costs reminds me, I have just increased our subscription by a pound to offset the increase in postage. Those of you who took out our 5 year subscription offer will no doubt be thinking – about time too! They are now saving even more money (if memory serves it was £60 for 5 years when we last had that offer some 4 years ago now, if I opt to make that offer again it will be £75 next time). So, it now costs £18 to join, a £3 joining fee and £15 a year subscription.

I feel truly inspired by Tony Marshall's recent offering, the 100th edition of "Rum Car News", I have mentioned the Register of Unusual Microcars, and Tony's wonderful colour publication "Rum Car News" within these pages before, but he has excelled himself for their centennial edition. Well done Tony, keep up the good work (and do you accept commissions?) we've only got a dozen more to go to reach that milestone.

From inspired to harassed in one paragraph – last week I had jury duty, my aunt from London who I stayed with during my trip south in March, came to Scotland for a 10 day visit in April, took ill, had a big operation, and is now in hospital in Glasgow where we try to visit her several times a week.

The Rover did scrape through its MOT, but had no less than 7 points highlighted on its advisory notice, 2 of which I had ignored from last year, so it went in to get the 4 most urgent ones attended to, and a couple of non-MOT related jobs done. Why does it cost more to maintain my 8 year old car than it does my 17 year old one? The Citroen, my trusty and much loved BX, "Sammy" as he has become affectionately known, passed his annual inspection last month also, and with only 3 advisory's!

I must apologise for my failure to advertise Fred Heath's Rebel saloon in the last edition. The red Kitten you saw on the cover two editions ago, which was for sale, was snapped up for the asking price of £1,500, actually more than that, as the value of the new tax disc was added to the price, and for some daft reason I had assumed that Fred's Rebel would have been long gone, what with Fred's high level of care, and its interesting and well known history. However, not so. See the adverts page or just give me a ring if you are interested. Fred rang me in April, yes from Cyprus. Good to hear your voice again Fred.

Oops, update on that story, I just had a call from Chloe's dad Stuart Hale in Huddersfield, he bought it in May.

It is (was) the end of April now, thanks to Duncan Bradford, Terry Horler and Al Osborn this edition is half done and that is before any pictures have found their way in, so we are looking good.

Harry (Darby), don't be offended, as you know I included your letter about engines and in particular more powerful ones used for other things than propelling Reliants in the last edition in a desperate rush, and I was glad to have it, and to hear from you, but I may have fallen into the trap of acting in haste – which can be a good thing. John Box was motivated by Harry's letter to put the record straight. That said there used to be a Brian Marshall out there – no, not me – he had something to do with a Volvo Car Club (don't get excited George Mitchell) it was a long time ago. Feel free to let me know if he is still active in that regard. My point (see, you thought I had really lost it there didn't you?) is that there are people out

there with the same name, even in the same field, so confusion can occur quite easily. You can see John's response to Harry's letter on page 11.

Oh, hang on, Harry wrote again, it would seem that my eyesight / his handwriting, and or my more confused than normal state of mind together with the more mad than usual rush I was in at the time may have conspired to create the errors in Harry's original letter – well, that's one way to see if anyone reads all this, not to mention a means of filling a page or two when times are lean! So, with my apologies for any mis-representation in Harry's original letter, see his reply after John Box's response – sorry Harry, and John. But thank you both for taking the time to keep me on the straight and narrow. Ed.

~.~.~.~.~.

REBELLIOUS CONDUCT 16

By Terry Horler

When I last reported in late 2008 it was with fingers crossed that LRF 671K would make it through the worst of the winter months without my tools having to come out of hibernation. This is not necessarily helped by the Rebel having two weeks off over the Christmas period whilst I am away. Usually upon my return, something seizes up, drops off or simply malfunctions. So following two weeks of freezing cold inactivity, the Rebel woke up without protest on the Sunday evening ready for an early start back to work on the Monday morning. But no, if it could start after two weeks of slumber, then why not after just twelve hours? It seems the lower temperature of a winter's morning was just too much for its three and a bit year old battery. Having no time to go off in search of a new battery, subsequent mornings saw me jump starting the engine from a spare battery that was just too large to fit the Rebel's battery tray. Then one morning I forgot, but the Rebel started and continued to do so unassisted ever since. Well, until Easter anyway. Another two weeks away leaving the Rebel to slumber over the Easter break proved the final straw for the electrical reserve. Fortunately, I discovered the Rebel to be a non starter on the Friday evening giving me Saturday to find a new battery in good time for the early Monday morning return to work. As before, none of the usual local high street battery suppliers could provide a type 895 battery, no good at all saying its for a Reliant Rebel, no such listing was the response. Fortunately, Bristol Batteries stock all sorts and types of batteries and at £43 was no more expensive than August 2005 when I purchased the previous one from them. Accompanied by the same comment, "You can go and cut the grass now sir" It seems the type 895 is more commonly supplied to fit small tractor mowers.

Just as the really low temperatures eased off a bit, the exhaust down pipe broke away from the silencer inlet pipe. I did a temporary fix on this some time ago; clearly, time was up on this one. As a better temporary fix, I made up a stepped sleeve and let this into the system. At least I have joined good metal to good metal this time so it should last the life of the rest of the system. I made up and fitted a bracket between the bell housing flange and down pipe some time ago and this has solved the manifold flange problems, the tailpipe is sure to be the next section to crumble. Fortunately, the silencer is stainless steel so no worries there. Is that tempting fate or what?

At last, I have changed the gearbox for the one I collected from Mike Plummer last August. Not a moment too late it seemed. The carbon release bearing was about to expire. Unfortunately, I still have a gearbox that will slip out of third gear on the overrun, but on the plus side, it stays in top gear when accelerating. Well, for the moment it does, my previous gearbox was like that for a while. Could this be a common failing on the all synchro Rebel gearbox I wonder? I did notice a couple of differences whilst undertaking the swap. My original box had a boss either side of the bell housing, no doubt to carry a cross shaft clutch release mechanism. Possibly for the three wheel Reliant application. The 'new' gearbox had no such bosses. The prop shaft that came with the 'new' gearbox was shorter than the one fitted to LRF. I refitted the original prop which seemed to have sufficient clearance. Certainly, the 750 Rebels have a different propshaft but it seems as though my Rebel retains the 700 'long shaft' despite having the all

synchro gearbox. I shall have to remove the prop again as the front U.J. is worn, as is the one on the 'new' prop shaft, but which one to recondition?

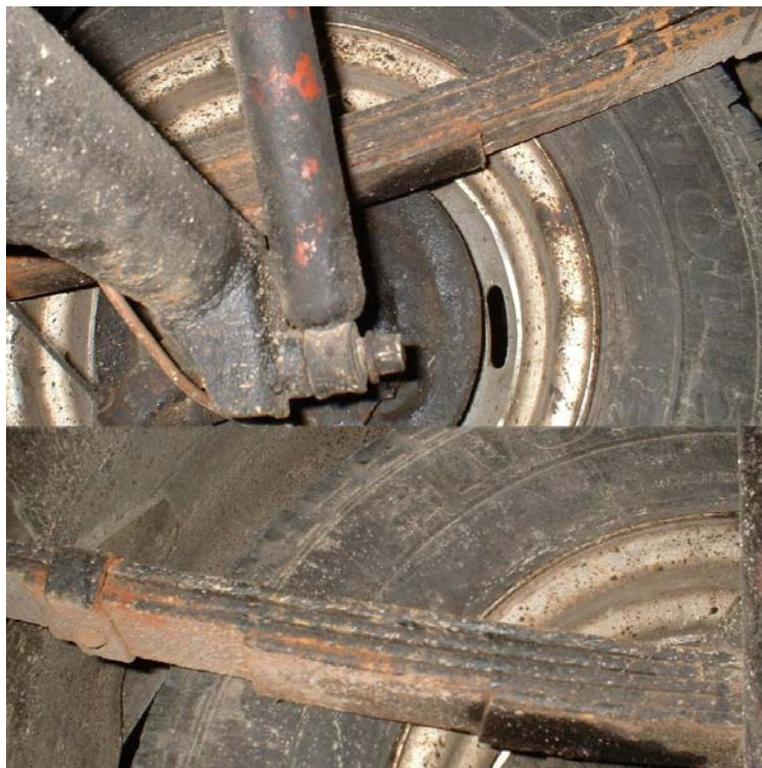
I noted in the January/February edition of Mewsletter the discussion on master cylinders used on the Rebels. My own 1972 Rebel was originally a van with a 700cc engine. However, it has the 750 type all synchro 'long lever' gearbox and hydraulic clutch. This is not a subsequent modification but factory fitted despite later 700 vans having the 'short lever' 3 synchro gearbox and mechanical clutch. In the earlier discussion it was stated that the brake master cylinder changed from horizontal positioned mounting holes to vertical to make room for the new clutch master cylinder. Not so in my case. Both brake and clutch master cylinders have horizontal mounting holes and being placed either side of the main chassis rail, there is no clearance issue. Rather than modify the chassis in any way to change from one version of master cylinder to the other, I made up an adaptor plate in 1/2" thick steel and drilled and tapped 4 holes to accept the disposition of both cylinders and chassis mounting holes. I can now use either type but retain the original horizontal brake master cylinder for now. The vertical hole cylinder is 1/2" shorter in the main body and hence the adaptor plate will still position the filler cap centrally with the access hole in the floor.

Other than that, I have at long last replaced the leaking rocker cover gasket and given the engine a celebratory wipe over. I will now go and strip my original gearbox to find its dislike to stay in third and fourth gears.

Terry Horler - No. 755 Bristol

~~~~~

## Foxes Den



*O.K., some detective work for you. Les has sent me these pictures (Yes look carefully, it is 2 pictures, just your less than perfect editor can't separate them!) of the different springs on the back of his Fox. Does this explain why it sits high at one side (or low at the other) and if so why?*

*Answers on a postcard please, or any other medium that takes your fancy!*

## I DID IT MY WAY - UPDATE

It is a while since I have written about my Tempest. The last you heard I had made some changes to the exhaust, inlet manifold, camshaft and flywheel, to improve low rev. power and torque. That was in 2006 whilst I was in the middle of my Chemotherapy treatment.

The Chemo treatment has gone now, as has the tumour and associated cancer. I cannot believe that 3 years has passed, I'm now into my third year check up with it unlikely to return, another two years and the doctor said that it will not return.

I managed to get the car back together, running, and some trials completed in 2006. The changes had the desired effect and the car will now climb serious hills at 1,000rpm without stalling. The heavy flywheel keeps the engine turning over and the camshaft provides the power at low revs. I am now able to keep up with the dreaded Marlins with their 6 cylinder engines and bags of torque.

Dave Price in action in his Tempest, one of two which John Box kindly allowed to be built after he stopped production before he sold the business in 2000.



We attempted a full year of trials in 2007 but ran into electronic ignition problems. We retired on our first trial half way through without any sparks at the spark plugs. Returning our ignition system to the manufacturers for tests showed nothing wrong. To make sure, they provided me with a new system. The next trial resulted in the same problem, and it appeared to be when the engine was particularly hot. This time I had taken a spare distributor with points which got the engine running again. The manufacturers of the electronic system assured me that being hot should not prevent the electronic system from operating. The next trial resulted in the same failure, and during the rest of 2007 we tried several cures. New spark

plugs, new and different coils, ballast resistors fitted, and without, but all with the same results. We did not resolve the electronic ignition problem and now run on the old points system. So much for stronger sparks and greater reliability from the electronic system.

No, before you ask, Dave did not tell me which or whose electronic system he was using, and I can't remember if he told us the last time he wrote – but I am sure I will be asked – care to enlighten us Dave?

When the car was running we were climbing the hills quite well, sometimes beating the dreaded Marlins, sometimes not, all good fun.



A view many will see, the back of Dave's Tempest in action!

We entered the National Trial Championship for 2008 which for mainly weather reasons was not a good year, but at least we ended up on the championship table with some points.

This year we are making up for it by entering for the championship early and starting at the beginning of the season. There are 12 trials in the championship season and you count the 9 best results. Thinking it would be safe to enter late and do 9 during the summer caught me out last year. This year the first trial was to have been last week, but it was cancelled due to the site being water logged. So that does not work either!

I will let you know the results of this year's trials and the modifications next year.

Dave Price - No 327 Moreton in Marsh

*Thanks for the update Dave, keep up the good work, and please don't leave it another 3 years before you bring us up to speed again! Ed*

Dear Brian,

20 – 4 – 09

I think member 100 is getting his Harrys mixed up. Webster was a Triumph engineer and Richards was the combustion man. The wartime fire pump engines were mostly made by Coventry Climax and were later modified to power many post-war small sports cars not to mention G.P. cars.

The Reliant engined pumps are made by Angus Fire Armour, but I don't know when production commenced. I don't think they use Reliant engines any more due to supply difficulties.

One sees them for sale at autojumbles sometimes and they are a good source of replacement engines as they have rarely done a lot of running and are tested to the max. output of 40 B.H.P.

I have never heard it said that Ricardo was involved with the Reliant engine.

Kind regards, John (Box) No. 044 - Burton in Kendal

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

Dear Brian,

May 2009

You do appear to have made a bit of a clanger in the last Mewsletter, you quoted me as saying the biography of Harry Webster, you should have said Harry Weslake, the gas flow man!

Weslake designed and built a V8 formula 1 engine for Dave Guerney? which performed very well.

You will probably be having corrections from knowledgeable Mewsletter readers sooner rather than later, if you have not already.

I hope you get a second mortgage for Arleen's wedding O.K.!

With best wishes and kind regards to you both.

Harry (Darby) from Barry No. 100

*Sorry Harry, (and I hope I've got the F1 chap's name right) I'll know what to do in future if I am short of material to fill a page! Ed.*

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

## **Over 40 uses for WD40!**

A lady got up very early one morning, and went outside to pick up the Sunday paper, she noticed someone had sprayed red paint all round the sides of the neighbour's brand-new beige truck.

She went over, woke him up, and gave him the bad news. He was, of course, extremely upset, and they stood there trying to figure out what could be done about the problem. They decided that there wasn't much recourse but to wait till Monday, since nothing was open.

Just then, another neighbour came out of his house, surveyed the situation, got his WD-40, and cleaned the red paint off with it.

Guess what! It cleaned that paint off without harming the original paint on the truck! I'm impressed!!

Water Displacement #40. The product began with a search for rust preventative solvent and degreaser to protect missile parts. WD-40 was created in 1953 by three technicians at San Diego Rocket Chemical Company.

Its name comes from the project that was to find a water-displacement compound. They were successful with the fortieth formulation: thus, "WD-40".

The Corvair Company bought it in bulk to protect their Atlas missile parts. Kenneth East (one of the original founders) says that there is nothing in WD-40 that would hurt you...' "IT IS MADE FROM FISH OIL".

When you read the 'shower door' part, try it. It's the first thing that has ever cleaned that spotty shower door. If yours is plastic, it works as well as on glass. It is a miracle! Then try it on you stovetop... It is now shinier than it has ever been before.

- (1) It protects silver from tarnishing.
- (2) Removes road-tar and grime from cars.
- (3) Cleans and lubricates guitar strings.
- (4) Gives floors that `just-waxed` sheen without making it slippery.
- (5) Keeps flies off cows.
- (6) Restores and cleans chalkboards.
- (7) Removes lipstick-stains.
- (8) Loosens stubborn zippers.
- (9) Untangles jewelry chains.
- (10) Removes stains from stainless steel sinks.
- (11) Removes dirt and grime from the barbecue grill.
- (12) Keeps ceramic/terracotta garden pots from oxidizing.
- (13) Removes tomato stains from clothing.
- (14) Keeps glass shower doors free of water spots.
- (15) Camouflages scratches in ceramic and marble floors.
- (16) Keeps scissors working smoothly.
- (17) Lubricates noisy door-hinges on vehicles and doors in homes
- (18) It removes black scuff-marks from the kitchen floor! (Open some windows if you have many marks).
- (19) Bug guts will eat away the finish on your car, but can be removed quickly with WD-40.
- (20) Gives a children's play-gym slide a shine for a super fast slide.
- (21) Lubricates gear shift on lawn mowers.
- (22) Rids children's rocking chairs and swings of squeaky noises.
- (23) Lubricates tracks in sticking windows, and makes them easier to open.
- (24) Spraying an umbrella stem makes it easier to open and close.
- (25) Restores and cleans padded-leather dashboards in vehicles, and vinyl bumpers.
- (26) Restores and cleans roof racks.
- (27) Lubricates and stops squeaks in electric fans.
- (28) Lubricates wheel sprockets on tricycles, wagons, and bicycles for easy handling.
- (29) Lubricates fan-belts on washers and dryers, and keeps them running smoothly.
- (30) Keeps rust from forming on saws, saw-blades, and other tools.
- (31) Removes splattered grease on stoves.
- (32) Keeps bathroom mirrors from fogging.
- (33) Lubricates prosthetic limbs.
- (34) Keeps pigeons off the balcony (they hate the smell).
- (35) Removes all traces of duct tape.
- (36) Can be sprayed on one's arms, and knees to relieve arthritic pain.

- (37) Florida's favorite use----'Cleans love- bugs from grills and bumpers.'
- (38) Protects the Statue of Liberty from the elements (who, for goodness' sake is going to spray it on that?).
- (39) WD-40 attracts fish. Spray a LITTLE on live bait or lures, and you will catch the big one in no time.
- (40) Takes the sting from ant-bites immediately, and stops the itch.
- (41) WD-40 is great for removing crayon-marks from walls. Spray on the mark, and wipe with a clean rag.
- (42) If you've washed and dried a tube of lipstick with a load of laundry, saturate the lipstick-spots with WD-40, and Hey Presto! The lipstick is gone!
- (43) If you spray WD-40 on the distributor- cap, it will displace the moisture, and allow the car to start.
- (44) Keep a can of WD-40 in your kitchen- cabinet. It is good for oven burns, or any other type of burn.

You might want to copy this and hang it inside your kitchen cabinet for quick reference....also your garage and laundry area. If so just send an sae to Brian and he will print a bigger version off and send it to you.

It takes away the burned feeling, and heals with NO scarring. Remember, the basic ingredient is FISH OIL.

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

## Letters

Dear Brian,

12th April 2009

I am surprised that no one has been in print in the magazine in response to your "pun" in the epilogue of Mewsletter 84. I did phone you to discover that you were away on a trip and your good lady probably thought I was mad!

With regards to Fred Heath's "Triumph" I follow your train of thought, but feel it could stand study in more depth.

According to my sources Triumph motorcycle production moved to the BSA factory at Small Heath when Meriden closed in 1973. However in 1966 production of the Triumph Tiger Cub was moved to Small Heath with the introduction of the T20 Bantam Cub. This was a Triumph T20 motor in a BSA Bantam frame with a Triumph Tank. In 1967 this became the T20 Super Cub – still the Triumph motor in the BSA frame, but with full width hubs and a Bantam style tank.

This leads me to suggest that Mr. Heath's second journey from end to end might have been termed a "Triumph" more correctly if carried out by one of his offspring – or at least one of later stature – perhaps in a younger Fox, rather than a Kitten or a Rebel!

Whatever, my congratulations on the achievement.

Yours Peter Burt - No.577 - Brampton

p.s. before you ask, yes, I did once own a Bantam / Super Cub and yes, even with the later silencer, they did have a bark.

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

# “TOM KITTEN”

By Lyn Rodden

All my working life I have been involved with cars from the very minute I passed my test.

I have delivered new cars and trucks from the Rootes, Morris Austin, Jaguar, Triumph, Rover, Land Rover, Commer and Ford factories to dealers all over the country, then in later years worked for car hire companies delivering and exchanging vehicles all over the country again. Owned a vast assortment of cars over the years, but there was always one car I always fancied owning – it wasn't huge, impressive, expensive, classy or attractive – it was a Reliant Kitten.

I kept searching for a bargain and kept getting thwarted, either they were too expensive for my purse at the time or they were ready for the scrapyard.

I knew of two in Cornwall that were roadworthy and in use but at the time did not have a chance to own them – then suddenly one was off the scene. It belonged to Brian Radford who now runs the Northmead Online Classic car website, he had sold it.

There was only one now and I knew that that was a 'no go' as it was Peter Tippet's "baby". I used to promote vintage rallies in Cornwall and he always used to turn up with his orange Kitten and use to park up with the Bond Bug boys and what a spectacle they were - a row of vivid orange vehicles glinting in the sunshine.

Early last year I left Cornwall and came up to Blackburn to live. I had hardly had time to settle in when I had a phone call from a friend down there saying that Peter had passed away and his nephew (another rally friend) was selling Uncle's car. I got in touch immediately and said that I would be in Cornwall again for a holiday in June and would like to try the car; he said that was not a problem and we went down on the Friday. I had forgotten just how bright the colour was until I saw it again. I said "Kitten it's more like a ginger tom!!" Graham, who was selling it, said "Funny you should say that Uncle had a cat called "Tom" and his name tag is on the key ring"

I tried the car, bought it and right away called it "TOM". We spent the next two weeks having fun bombing around in the Kitten, then we travelled back to Blackburn leaving the Kitten down there for another week then I went back on National Express coach – what a trip – I think that that was the longest one I had ever done 13hours to cover 400 miles!!! I stayed overnight with my friend and set off early the next day.

"Tom" Kitten was purring up the A30 and then onto the M5 and we were doing very well until about 6 miles from Gordano Services, there was this very loud BANG and an even louder very expensive sounding - metal against metal- sound from the engine – I pulled over onto the hard shoulder, right beside the emergency phone – within 15minutes a breakdown truck appeared and the mechanic said that one of the blades on the fan (original part over 30 years old) had sheared off hit the bonnet piercing it and then dropped straight down into the water pump.



He loaded Kitten onto his truck and then went to Gordano and off-loaded it again saying that his hours were up but another truck would be there soon and not to worry, well he had hardly gone out of sight when the second lorry turned up, loaded Kitten again and off we went to Blackburn.

I had the new fan and water pump fitted and Tom was purring again. We showed him off at Hebden Bridge, Heysham and Leyland Commercial Vehicle rallies in 2008.



Now “Tom” Kitten has come to live in the North West, and in semi retirement, he should have a much more leisurely life, for years he has been struggling with everyday use on the hills in Cornwall, now he can travel on much easier level roads, and perhaps live longer in semi retirement.

We have now moved to Preston, and this year we hope to attend a lot more rallies –so if any member sees us at a venue – please come over and introduce yourselves, we would like to meet you.

Lyn Rodden - No. 860 - Preston

~~~~~

Hi Brian,

April 28th 2009

Trust you are both well. Enclosed a piece for your delectment. I was quite sorry that fancy manifold did nowt, but also pleased that my own work came out a whisker ahead. (Must be a whisker!!) I got an MOT on this new car in February - no trouble, but I did service the brakes first. Found all new parts in there – I was well pleased. BUT, I must forgive the previous owner for getting all the rear shoes on back to front! I have done this before (in days of foolish youth) can't say it makes a lot of difference, but every little helps. Perhaps it is a mench that needs to be in Mewsletter. Needs a drawing or decent photo. If you ask nicely then I could try to do one if you thought it was needed.

Yes please nicely Al., Ed.

So, you wanted to know the 5 most important things to change?? Forgetting order of preference - Bigger battery. Carburettor intake flare / radius. Front struts falling apart / rotting. Carb. float overflow. Clutch operating arm roll pins. Oiling bottom UJ in steering column. Fit overflow pot or pressured header tank to radiator.

I suppose I could help you with these 'Must do mods every Reliant owner ought do' I do not have page maker or anything, but as you can see I can handle WORD (well sort of) and Of course I have a modest idea on most of these mods.

Still got loads of second-hand spares.

Hear from you. Al Osborn

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

Us.

I am yet again, it seems to come round ever more quickly, sending a cheque off for our annual subscription to the Federation of British Historic Vehicle Clubs. This event makes me focus on our numbers more closely than at any other time of the year, and is one reason that I am more strict with late renewals than in the past.

These guys (and girls) are doing a great job on our behalf, and I am perfectly happy and confident that to support them in the way that we do is right and proper (so I guess that's me blown any chance of becoming an M.P.!). Having said that we now send out almost 10% of the magazines to other clubs, magazine editors, and our supportive advertisers, and I do need to keep an eye on costs.

I am, not for the first time, preaching to the faithful, because anyone who has not renewed this year will not be reading this.

The response to my final reminder notice this year was disappointing given that I had elected to enclose a simple tick box form and an s.a.e. in an effort to remove as much uncertainty and make things as easy as possible. A month after sending these out less than half had bothered to reply. Just what one has to do I really do not know. That said the vast majority of those who did reply have stayed with us, and by far the most common reason for leaving us was because the car had been scrapped – sad - but at least I know what happened in those cases and am not left wondering.

The fact is that our numbers, like the number of Kittens on the road these days, sits at about the 200 mark.

That cheque by the way, was for £76.32 this year.

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

The Daimler and Lanchester Owner's Club

Would like to invite readers to their annual "Great Eastern Rally" which has been held almost every year since 1975. It is open to visitors and owners of all makes of classic car. It is a static event, where the cars are on display for drivers, passengers and other visitors to look at. The 33rd "Great Eastern Rally" is to be held on Sunday 26th July, at Ingatestone Hall, Hall Lane, Ingatestone near Brentwood, Essex.

Ingatestone Hall is only about two miles from the A12 and about seven and a quarter miles from junction 28 of the M25.

Date: Sun 26th July. 10.00 am to 5.00 pm.
Title: The Great Eastern Rally.
Description: Vintage and classic car outdoor meeting.
Venue: Ingatestone Hall, Ingatestone, Essex,
Contact: Adrian Hanwell tel. 01277 227708.
Cost: FREE of charge.

The rally opens at 10.00 am and ends at about 5.00 p.m. It is an informal rally, which is free of charge for those that attend. No pre booking is necessary, but those wishing to come are welcome to contact the rally organiser, Mr Adrian Hanwell, in order to obtain more information. His telephone number is Brentwood (01277) 227708 and he is usually available at weekends and weekday evenings any time up until 11.00pm.

July is a popular month for rallies and I am sure that readers will have others to attend, but perhaps some might prefer to join us on the rally day.

Regards, Adrian.

Getting Technical

Lucas Distributors used by Reliant

Part Two: Exploration, Lubrication - and a bit of fettling.

Remove the distributor cap. Check the vacuum advance is working smoothly: detach the vacuum pipe at the carburettor end and suck on the end. You should see the contacts plate swivel a few degrees. Your tongue over the end should hold it there, releasing your tongue should see a smooth return of the plate. If not look for leaks in the pipe and joints, especially the elbow near the vac unit, which often splits. New ones are cheap but becoming obsolescent, so buy spares! A stiff or jerky action probably needs lubricating. More in a bit.

Remove the rotor arm from the upper drive shaft. Remove the felt pad to reveal the top of the upper shaft, around which is a gap. Put 2 or 3 drops of engine oil in here. The oil will creep down to lubricate the centrifugal advance mechanism lurking below. Replace the felt to absorb any excess oil to prevent mist or spray getting where it shouldn't. Good contact sets usually incorporate a 'fork' in which is held a second felt pad which rubs against the four cams around the upper shaft below the rotor arm. A couple of drops of oil moisten this enough to help it pick up any dust etc. off the cam and lubricate it slightly to protect the plastic heel of the moving contact from too much wear.

A common cause of poor performance is wear in the shaft bushes, detectable by trying to waggle the top of the shaft side to side. You shouldn't be able to. Equally common is wear in the pressed 'bearing' which joins the top and bottom of the sandwich plate that the contacts are mounted on. It is impossible to be sure of wear without dismantling further as explained below. At over 100 sparkings a second the slightest wear causes inaccuracy.

If you are confident all is OK replace the rotor arm, ensuring it is fully seated and firm. Its brass surfaces can be cleaned by rubbing on a tyre. Refit the cap having cleaned it, ensuring it is firm, fully seated and securely clipped. Check all leads are connecting properly at both ends. That's all that is necessary if all is working correctly. If the vac unit is not working smoothly, or you suspect something else may not have had attention for a long time, it's best to have a closer look. This is more comfortable with the disi off the engine – after all, only one setscrew holds it on – so here we go:

Have a clean newspaper and 2 small rags to hand. Remove the cap with its leads out of the way. Note where the rotor arm is pointing, to simplify putting it back. Disconnect the [low-tension] lead from the '-' terminal of the coil. Use a 7/16" spanner to loosen the setscrew clamping the base plate to the engine block, [don't disturb the pinch bolt], and remove it by hand so you don't drop it. There may be a packing washer beneath the plate, so be sure it doesn't get knocked down the hole. Put it somewhere safe. With a wiggle the disi will lift out. Put it on the newspaper with one rag around the oily end and stuff the other rag in the mouth of the hole to keep out 'foreign' matter. With the rotor arm removed, locate and remove the two pozidriv No.2 screws opposite each other in recesses of the wall of the disi body. One is used to earth the wire from the capacitor. Now you can lift out the contact mounting plate, complete with the contact set and capacitor. This plate is actually more like a sandwich without any filling. The mounting lugs are part of the base plate, the contact set is mounted on the upper plate which can swivel in relation to the lower plate. From the underside of the upper plate projects a pin which engages with the arm sticking out of the vac unit. When the engine is under light load it sucks hard on the vac unit, and harder still at speed, which pulls the lever, and hence the contacts on the swivelling plate, progressively into a more advanced position, meeting the cam earlier. So the upper plate should be free to swivel easily when required. The simple pressed bearing ring around the centre may need oiling or greasing, or wash any rust or grittiness out with WD40 before greasing. Do not leave any excess lubricant on the plates because there must be an electrically conductive path between them – spot the copper prong sticking up for this purpose. Poor contact here leads to erratic starting and running. Once it swivels freely, check for sideways play in the central swivel bearing linking the plates. There should be none detectable. Any play will give erratic performance from the contacts or electronic trigger. Fortunately lots of different distributors have interchangeable plates. Some have a pin sticking up to operate sliding contacts, some don't, and have a pimple on to locate the points instead of a dimple. Just use the alternative points to suit the plate.

In the bowels below the contact plate you can see the springs and weights mounted on a base plate that makes up the top end of the lower drive shaft. The weights are actually levers and when the free end of the weights swing outward, the inner ends act on the upper shaft and lever it around ahead of the lower driveshaft. Because the upper end bears the four cams that open the points, or the trigger for the electronic ignition, the ignition becomes advanced in relation to the driveshaft.

The advance weights, or levers, swing out further with greater speed up to a limit set for the particular distributor. This action is damped, or controlled, by springs. One spring is slack, so its action comes in later to augment that of the first spring at a set point and to a certain degree. More in Part 3, as we are at present just ensuring that everything is capable of working as it should. Satisfy yourself with poking at the weights with something pointy until you're satisfied that they are free to move, not catching or suffering from lack of lubrication. If you twist the upper shaft anticlockwise the weights should lever outwards freely and smoothly. The maximum amount it can turn, in degrees, is stamped on a 'stop arm' that does what it says. This figure is the maximum centrifugal advance for a particular distributor, which is 15 for most 850s, 13 for the 41961 ['yellow-top' HT-E engine]. You can see why a little oil under the rotor arm every few months is a good idea when these weights need to alter position with every slightest fluctuation in engine speed.

All this is fine as long as the lengths and ratings of each spring, the limit set, and the settings for the particular vac unit fitted are correct to give the most power throughout the working range of your particular engine. Part 3 will try to find out how to find out, and look at ways to improve things. For now, put it all together and enjoy the improvement. When you reassemble it, make sure you have the correct washers beneath the mounting screws for the contacts and capacitor. Otherwise the screws can be long enough to foul the lower plate and prevent it from swivelling.

Set the timing statically, check the engine runs [!] then turn the distributor clockwise, advancing it until the highest idling speed is reached. Road test, listening for any pinking. Advance the distributor until pinking is heard, then back it off until it disappears. You may well run out of adjustment on the fixing screw in its clamp-plate slot, in which case resort to slackening the pinch-bolt about 2-4 turns and reposition the distributor. Be careful to keep the clamp level and the distributor seated, as the disi can lift out of the plate when the pinch bolt is over-slackened, or the plate can tilt and not seat cleanly. You may be surprised how

much more advance you need, especially if you've taken the opportunity to fit an electronic kit. Just beware the dangers of pinking though, it puts excess strain on your engine. A little, occasionally, to find the limits when timing, but then retard the ignition again so regular pinking disappears.

Duncan Bradford No. 46 from Norfolk

.~.~.~.~.~.

Dear Brian,

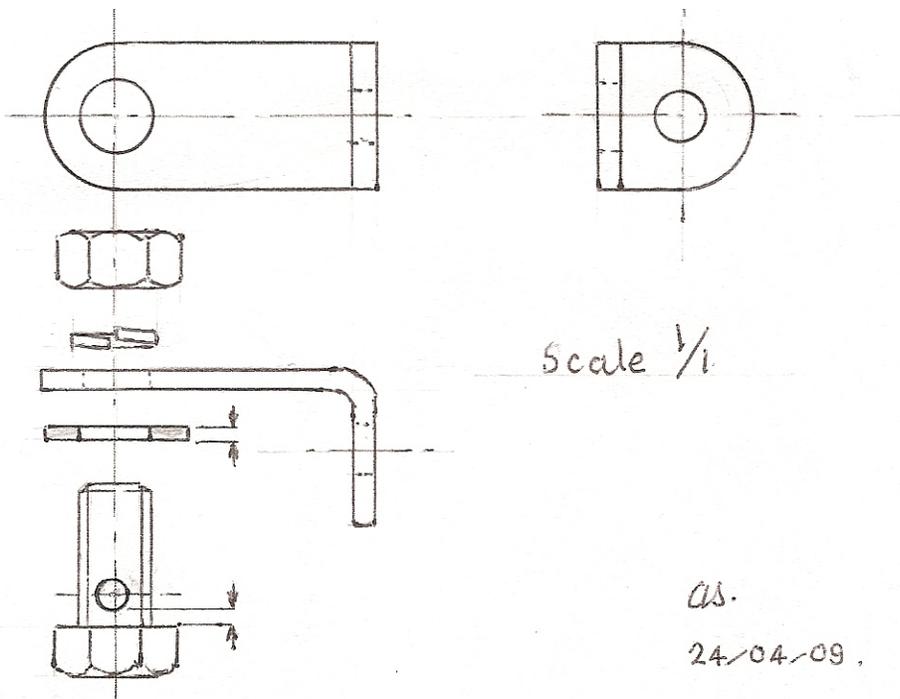
24/4/09

We've had clutch cables break on both Graeme's Kitten and my Robin. If this kind of thing is going to happen after every 30 years we shall need to consider the position.

In both cases the break occurred where the cable end meets the screwed rod adjuster. The spring back of the clutch arm fired the Robin's screwed rod nuts through the hole in the pivot. We never found them.

I have now fitted a nut on the other side of the pivot on my Kitten's as yet unbroken cable. The screwed rod reversed, together with the link shown below might provide me with a quick roadside mend.

Alan (Shaw)



I haven't interrupted much recently, but I thought I ought to bring to your attention the fact that Alan and Graham, father and son, have both owned their Kittens from new, Alan has also owned his Robin from new. So when they speak, it is with a certain authority, not to say experience. When I tell you that the first thing Alan had (the then) young Graeme do when he arrived home with his new Kitten on 30th April 1979 (though built in 1977) was to remove all 4 road wheels and brake drums, grease them appropriately, and then reassemble them, you may begin to grasp the high standards of maintenance these Kittens have enjoyed these past three decades – £2,324 it cost Graeme back then, it was GBS special edition model, at the time there was a 40 week waiting list for a Kitten. By July 1980, when Alan got his, the waiting time was down to just 10 weeks! The car was purchased from Kastle Green Autos, now trading as Oldham Reliant,

who got it from a dealer in Carlisle, it had 127 'delivery' miles on the clock and it came with Cobra cast alloy wheels, non standard Reliant Wipac round spot lights, as used on the Robin, rear fog and reversing lights with non standard switches which were later removed. Twin extra thin coach stripes. Only 5 GBS special edition Kittens were made as far as Graeme knows. They did not 'enjoy' the tartan seats that the GBS Robin's had! It has done 110,000 miles to date. . Interestingly enough, if memory serves, Alan uses at least 1 can of WD40 annually on chassis maintenance and lubrication!

Ed.

~.~.~.~.~.~

Disappointment

By Al Osborn from Norfolk

I haven't been seen or heard on these illustrious pages for some time - been very busy! But one of the busy things has been getting a new(ish) Kitty car. I bought from another Register member an estate car back in December 2008, and what a wonderful car it has turned out to be! It had a lot of the modifications I have put into these pages over the years and many more, most of which I always wanted.

Firstly the demise of PMF my spotty blue van for 24 yrs! and 268,000 miles. Finally its chassis rotted for the umpteenth time and with sad rear springs, knackered rear door, steadily rotting electrics I cried enough. Its spirit lives on though, the registration number was given to a friend probably to fit onto a motorcycle. While the body might come back as a rocket. More on that another day.

Now the new machine, all the usual mods. - electronic ignition, electric fan, larger battery, extra carpetry. How about a FOX chassis and then some mods I have always wanted, 12" wheels, oil cooler that takes the heat to the water system. What a mod! Normally the heater is so good!! That one might turn it off on June 26th !! This is the first time I have had to turn the heater off in JANUARY!!!! Wow. Other mods - reversed carb. No real advantage except space and removal of that awful looking drip tray. Then there is the 4 branch exhaust manifold, as per the later Reliants, what a wonderful tidy up. I don't think it gives anything special at the top end but the sparkle is remarkable.

Now we come to another modification and the title of this piece. For some time now most of you with any idea towards tuning these engines will hopefully know about the inlet manifold modification that combines 1 and 2, 3 and 4 inlet tracks at the head. When I have looked at this mod and showed it to other knowledgeable engine people, they have all said, 'I can't see that that will do much if anything' So having one of these modified manifolds on the new machine, an hour or two to waste and a small pile of inlet manifolds variously tuned, I decided to play. I removed the balanced ports manifold as above - fitted a standard manifold - and leave everything as it was. Go for a ride (thrash it a bit) result? As was, i.e. the fancy port mod was not noticeably different to standard. Richen the mixture a couple flats for return run, still nothing discernable. So back home try number three - this is in effect a design I had come up with over the years. There is a balancing hole between 1-2 and 3-4 but done with a drill and there is some work in the area of the drop from the swan neck around the right angle turn. Again all settings were left as was. Result? It ran very well as before initially, then I realized that there was a bit more sparkle in everything it did. Again no change to the top end, it still only just goes nationwide illegal but this time it will do that on ¾ throttle. This to my mind means that the bottleneck in the performance is not in the manifold, we have to search elsewhere. But also fancy modification to inlet manifold doesn't do much if anything.

So the disappointment is with the fancy balance mod to the inlet manifold. Yes with a standard engine there is a mixture un-balance, 2 and 3 run slightly richer. This could be the nasty exhaust manifold, but also the inlet manifold has some answering to do. If you look at it you will see that ports 1 and 4 are 50% longer than 1 and 4. This is eased by a balancing hole (or the fancy mod) once eased the engine sounds a touch better the plugs look the same so things must be better, well it gives you a good feeling even if it doesn't do a lot. But I am sorry that the wonderful modded inlet manifold isn't that special after all.

I admit that I haven't done any long term tests, and I haven't done any MPG test, but back to back- no change in mixture must mean that nothing large is changed with performance. I will continue to search for any more minute improvements and let you know.

Alan Osborn No. 295 - Thetford

.~.~.~.~.~.

Latest from the Federation – The government's vehicle scrappage scheme

April 27th F.B.H.V.C. Car scrappage scheme statement:

The FBHVC remit is to look after historic vehicles over 25 years old and so at first glance this scheme would not appear to affect our members, as most vehicles that age would be worth more than the effective £1000 provided by the scheme, but of course we have to remember that these younger vehicles just might be the classics of the future as well as the future of our members' hobbies or businesses. We do not have the power to oppose the scheme but we are determined to fight to keep our vehicles on the road and preserve our motoring heritage. With the help of our member clubs we can only hope to influence anyone who is considering scrapping an historic vehicle by education and example. Our vehicles are not the 'old bangers' at which the scheme is aimed – they are well maintained and cherished and we have a wealth of statistics that prove that classics do not contribute significantly in any way to pollution and greenhouses gases.

We ask all our members to help spread this message and preserve our motoring heritage as well as uphold the freedom to drive our vehicles.

My thanks to the Federation for the above information from April 2009.

.~.~.~.~.~.

Parts

Not a lot to say here this time. We have just ordered another batch of front dampers and springs. Interestingly in these times, both firms, especially the spring manufacturers, are very busy. Lead times on the dampers are up by a week or so, but double the normal month to wait for the springs. Just as well we still have a couple of pairs in stock!

I was a little saddened, though not greatly surprised, that after years of people asking for them, to date we have only sold 1 pair of Fox back springs since we had them made in March!

Sales and Wants

For Sale :- 1976 Reliant Kitten estate. Was a one owner car from new till 2008, only for sale again now due to bereavement. Fred Rolph's old car, maintained to a very high standard. Low mileage, under 40,000 miles from new, it has an unleaded head, Kenlwe fan. Lumenition electronic ignition, complete new braking system (Master cylinder, wheel cylinders, copper lines and Goodridge flexes.), stainless exhaust and three row radiator. Good chassis, the body could benefit from a re-paint. It has had new front struts and back springs, and sits on a set (5) 5.60 by 10 Dunlop alloys. New battery and alternator, has negligible oil consumption and an electric fuel pump and filter king. Offers in the region of £1,000, Contact Mr. S. Dance Worcester area.

For Sale :- Kitten rolling chassis with excellent ball joints, wishbones and steering rack. Body only removed due to extreme vandalism. Peter Burch-hill Derby

For Sale :- A 4 branch manifold, cylinder head, various other spares. Contact Frank Heil also set of 10" alloys with tyres open to offers.

For Sale :- Gearbox Syncro rings John Box at Stable Cottage, Thornleigh Drive, Burton in Kendal LA6 1NQ

For Sale :- Terry's bits :- Reconstituted lower steering column £25. Set of new Std Hepolite piston rings £30. Engine manifold gasket (new) X 2, £3. Manifold aluminum heat shield (new) X 4, £5. SU carb top with spill pipe (new) £25. St/st Mini full wheel trims X 4 (used) £20. St/st Mini hub caps (used) £10. Mini steel 10" wheels sandblasted and painted silver X 4 £30. Steel 10" wheels with tyres well used X 4, £20. Kitten van or estate rear spring helpers £30. Also new old stock SU replacement carb and gasflowed manifold to suit Kitten 850 £100. All prices are subject to sensible offers and exclude p&p. Contact Terry Dixon

For Sale :- Al Osborn has a pretty extensive stock of good secondhand parts available. Give him a ring for details

For sale :- A selection of second hand Fox back springs. Contact Les Smith in Ashford (Kent)

Free to a good home :- Kitten shell and chassis, I have stripped her down and am giving away the shell and chassis for free to anyone that wants to collect her. Nigel Williams South East Wales She has a logbook and registered with DVLA. It is on a SORN

EPILOGUE

Here we are again, April still, just, and only 10 pages out of 28 left to fill, and there are still no pictures in it yet! I have to say this one has been a pleasure to do with articles and letters coming in fairly regularly over the past month. Terry Horler, our regular Rebel man, Al Osborn back on stream with details on his 'new' Kitten, and input from John Box and Alan Shaw two of our wise ones (I hesitate to say wise old men!). Steve Broomhall, who not only carried out the extensive work on the turbo charging of the 850 engine in his Kitten, of which more next time, (thanks Steve) but took the time to keep us in the picture and supply the photos of his, and other even more extensively modified Kittens, again, next time, (thanks again Steve) and of course your editor's ability, at last, to take advantage of some more of Duncan Bradford's wisdom. Thank you one and all.

I particularly enjoy contact with those who have left us being renewed, Terry Dixon, who has not owned a Kitten for a couple of years, still has 4 motorbikes mind you, (always easier to justify the collection of smaller things to the spouse!) and the list of Kitten parts you will see advertised on the previous page. It is always good to catch up with names from the past, particularly when the current custodian of their old car is still with us and I am able to confirm the car is still on the road. Gives one a warm glow and is one of the many things that make doing this all worthwhile.

Update on the first paragraph above, Lyn Rodden kindly sent me the story of "Tom Kitten", pages 16 – 18, which very neatly lets me keep Steve Broomhall's pictures back till next time, which will tie in exceedingly well with the front cover we plan for it, right now 12/5/09, and with a long day planned for Thursday, which will include a farewell visit with Bob and Judith Riches, those intrepid Liege owners over from Oz, things are looking good – well, what was that someone said about a Father of the Bride speech?!? Moira thinks it inappropriate for me to begin with the opening line "Good afternoon, welcome to this historic location (the New Lanark Mill Hotel in New Lanark Conservation village) for our own historic occasion, my name is Brian, and I am a chocoholic".. but we will see!

I was talking to Phil Hallam the other day at a certain club's AGM, yes, his Rebel is still on the road, and he was telling me that he had just collected some Rebel doors, a bonnet and boot lid from Robert Fairfoull, which now reside in the roof space of his garage beside the stock of such bits he has had there for a while, and we realised that we don't mention such stocks terribly often. Adrian Hanwell had recently mentioned that we do not push his extensive stock of Rebel spares often either. What to do? I would say that you know they are there and available, but then I was asked last week how much Fox back springs cost, (£176 a pair plus delivery) and it was only in the last edition that those details were published. So, perhaps I need a rethink. Suggestions welcome.

My proof reader pointed out that I ought to share with you the good news alluded to over the page, that Colin is to make an honest woman of our lovely daughter Arleen at New Lanark Conservation Village on Sunday the 5th of July (no jokes about it being the first day after Independence Day please – I've booked that one for said speech!) So from then on our lovely daughter will be Mrs. Barr. (Oh, and I have the Iron Brew jokes covered as well thank you).

Well it is now May the 21st and things have moved on. I have had not one but two enquiries in the past few days from Vantique owners with whom I have not corresponded in the past – I ask you, what are the chances of that happening twice in the same week? This is all just so much fun!

Not however too much fun that I am about to forget grease guns, cans of WD squirty, or even a good old fashioned oil can – you know what you need to be doing – so what's keeping you?

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

Rockers realigned and lightened



Large selection of good used Kitten and general Reliant spares available, just ask for details. Also new 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

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 **E.Mail :** tracey.jones@grahamwalker.easynet.co.uk

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

MOTOR INSURANCE

IMMEDIATE COVER FROM THE SPECIALISTS



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