



July - August 2010

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

2 0141 886 6117 <u>www. info@kitreg.org.uk</u>



Geoffrey Mellor from Sutton-in-Ashfield has been with us for a decade now, keeps his car on the road year in, year out, flies the flag at a variety of events, yet keeps his light under the proverbial bushel. Well Geoffrey, your time has come, my good friend Derek Sloan was in England the other week, spotted your car in a show, took the picture, and sent it to me! I don't need to say anything about Geoffrey's standards of vehicle maintenance, the picture speaks for itself. Congratulations Geoffrey, keep up the good work.

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.....



The Reliant Kitten Register

Rebel parts stock held by: - Adrian Hanwell

New Kitten / Fox / Rebel parts stock held by Brian Marshall E-Mail info@kitreg.org.uk

Rebel alternative parts list contact: John Blagburn E-mail: <u>wirelessjohn@googlemail.com</u>

Kitten alternative parts list: **Situation vacant**. Contact the Editor to volunteer.

Fox alternative parts list contact: Duncan Bradford, 52 St. Phillips Road, Norwich, NR2 3BN. E-Mail <u>hidunc@ntlworld.com</u>

Our Mutual Aid Spares scheme is run for us by Phil Hallam 4, Greenhead Holding, Stevenston, Ayrshire KA20 4JX

Tempest Registrar: Martin Seymour 19 Cedar Court, Churchfields, South Woodford, London E18 2QU E-mail <u>mseymour@freenetname.co.uk</u>

Mewsletter pictures – should be sent to John Pearce at Toddbury Farm, Slapton Road, Lt Billington, Beds. LU7 9BP E-mail john@atodini.co.uk

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

RELIANT SPECIALIST

Dinky Cars

Wennington Marsh Farm, Wennington Road Rainham Essex RM13 9EE Tel: 07958 246891

SALES, SPARES, REPAIRS, ENGINE RECONDITIONING

INDEX

Page	3	Index
Page	3	Editorial ramblings
Pages	4-5	Brian's Diary – March 2010
Pages	5-6	The Rebel in me – Part One
Pages	6-8	Old number three - update
Pages	9	Some thoughts on an engine test bed
Pages	9-10	Seats in a Fox
Page	10-11	Readers Letters
Page	11-12	Dementia Quiz – Lyn Rodden
Pages	12-15	Getting technical
Page	15	Parts
Page	16	Adverts
Page	16	Epilogue

Welcome once again. Thanks to a number of individuals, whose input is greatly appreciated, you know who you are, everyone was, at the time, spared a blow by blow account of my trip south back in March.

However, thanks to those people it has not been an arduous task to maintain the size of the Mewsletter over the past year or so, suddenly, that has changed. I have now waited expectantly for the whole of July, to see what little gems arrive for inclusion within these pages, Peter Hemming wrote a letter which you will read further on, but other than that – and an article from my son-in-law in June, not a sausage! So, unless and until someone provides some appropriate material, you will have to both suffer more of my ramblings, and, in the short term at least, less pages – you know what is required should you wish normal service to be resumed. Sammy's (our beloved Citroen BX auto) tyre pressures to provide better fuel consumption – I'd forgotten just how efficient a well maintained foot pump is, thanks chaps. All this and two Kittens and a Robin on the premises as well, and all owned by the Shaw family from new.

On then via John Copestake's place to the wonderful couple of hours you read about last time with Paul Wheatley and "Little Lucy" – oh, that carb by the way was a 38mm ISO, I may tell you more about that in the technical bit, sorry I omitted that last time.

That night was spent at Thurlaston ahead of my Birmingham meeting on the Sunday.

The following three days were spent with my aunt in London, we visited the Greenwich Observatory, (something I have long wanted to do, well worth a visit if you have never been, you will learn a lot) a couple of miles from where she lives, an afternoon in Brighton, and I did get time out to call in and share a pizza with our Tempest man Martin Seymour, good to see you again Martin. I spent the Wednesday night with relatives in Beaconsfield.

On the way north from Beaconsfield on the Thursday I called in to Watford to see Brenda Dick, who I was delighted to find in excellent health, new hips can indeed make dramatic improvements to peoples' lifestyles – the dog even gets walked properly again!

Thence by way of Doncaster to Wensleydale to stay with old friends Michael and Janet, I used to believe that Michael had what was probably the best Rebel saloon in the land, till Phil renovated his over the past year. Mind you, Michael's must surely be one of very few remaining one owner Rebels in the land.

On the Friday morning, too lazy to read the map, I allowed the sat-nav to guide me from Wensleydale to the abode of a couple of old family friends whom I had not spent time with in a decade and a half or more. They live in a cottage in the middle of nowhere outside the village of Walton near Brampton. The sat-nav took me along some wonderful single track roads which reduced my average speed to 23 miles an hour, and so I was almost an hour behind schedule arriving, and, as a result, got invited to join them for lunch. Very enjoyable it was too. The original cottage is rectangular and symmetrical, door in the middle, windows either side of the door. Inside there are no internal walls, it is just one big room, no hall, through the front door and that's you. To the right is a three piece suite surrounding a coffee table, a T.V. on the corner, and on the end wall a real working fireplace. To the left, while the back wall is covered in bookshelves, the main floor space in dominated by a lovely black grand piano, there is a south facing window in the opposite end to the fireplace, it sheds light impressively on the piano.

The extensions the guys have put on over the years almost trebled the original footprint, and at the back and on the end beyond the fireplace there is a kitchen, bedrooms bathroom and workshop, Anthony makes harpsichords.

Anyway, time soon ran away, and I left them to head home. The plan had been to be ahead of the Glasgow rush hour traffic on the Kingston bridge, and with the fine weather and light traffic I decided to throw economy to the wind and make good progress – a plan which was going just fine, until I failed to spot an unmarked police car is a string of slow moving traffic I was passing just south of Beattock.

That was Friday the 23th of March, today (3rd July), I received in the post the court's decision, which I won't bore you with, suffice to say, make sure that you know where your driving licence is – I could not find mine, spent the weekend looking, applied for a replacement on the Monday (15/3/10) and finally got a new licence in June, far too late to be able to comply with the 28 day fixed penalty notice I had been given by the officers of the law on the day of the offence. Though the case was well documented (in my opinion, I had kept both the court, the DVLA and my doctor informed every step of the way) the court completely ignored the fact that the DVLA had taken 3 months to do something they claim to be able to do in 3 weeks, and the fine imposed was more than twice the fixed penalty. I had often thought that the law and common sense were strangers, sadly this experience has only served to reinforce that opinion.

Oh, the relevant point is that what I have said in the past about there being no fixed speed cameras on the A74, still is true, but of course there are unmarked police cars!

I was annoyed that I hadn't spotted it, and angry with myself because I have known for years that I don't know where my licence is – particularly infuriating because, after 12 years on a restricted one, after my last medical (about 15 years ago) they gave me one that ran till I was 70, that is the one I lost, now I have a photo one, which you need to carry with you, and I am back to a 3 year restriction, so, the moral is, keep your licence safe, and pay close attention to the occupants of the cars you are passing. Moira was quick to point out that if I had not been speeding in the first place all the hassle and stress, not to say expense, could have been avoided, and I guess she is not wrong.

Daughter and her close circle of friends were well Impressed that her aged father, and his equally aged (in car terms) diesel automatic car could do 94.3MPH, - I'm just glad they didn't catch me on the downhill bit! (I had been using the sat nav to check my speed closely, in fact the Citroen's speedo, though reading high at anything between walking pace to 60 or so, becomes very accurate at high speed, certainly on the well worn front tyres (2.2mm tread) it had on it at the time – I am conscious of the fact they take a particularly dim view of three figure speeds, so I had been well aware and careful what I was doing, perhaps more time spent on

observing the occupants of other cars, and less on comparing instruments, might be appropriate!) In spite of the delay, and not exceeding 80 the rest of the way home, I did beat the rush hour traffic on the Kingston bridge.

Oh, one slight surprise, they 'only' clock you for a third of a mile, not a long time at that speed, (about 12 seconds by my reckoning) I could just have been performing a brisk overtake!

Fuel consumption for the 1,200 mile trip was 57mpg, which I think proves that I was not going too fast for the vast majority of the trip.

An expensive lesson learned. Ed.

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

The Rebel in me... Part One

A tale in numerous parts by Colin Barr

I will start off with an apology. While I am not new to the motoring world I am new to all things Reliant. Given this fact I am sure I will make several errors throughout this article in regards to the technical names of parts etc (and I am sure that the editor, or my father in law as I know him, will take great delight in correcting these for me).

My introduction to the world of the Kitten Register, Mewsletter and all things Reliant started some time ago over a dinner conversation with my father in law to be at the time, Brian. We had been discussing articles he received for his magazine from you, the dedicated subscribers of the Register. In my wisdom (although I might not use that phrase now) I suggested that we should get a Kitten and use this car as a project which we could document the rebuilding of in the Mewsletter giving an article for each issue. A running biography of a classic car if you will. This seemed to impress my future father in law which to any man about to marry a daughter, is an important thing.

The wedding came and went and all seemed fine with the idea of a project car only occasionally being raised as something we should look into. That was until one day in late September 2009 when Brian said he has acquired old number three and the project car plan was to begin.

Never mind we had planned on working on a Kitten and now had a Rebel. Or that I had a garage full of junk and no place to put the car. A deal was a deal and so the project Rebel began.

First thing we had to do was get old number three. This was done by Brian across several days using not only Plan A but also Plan B and Plan C which all came about due to the demise of his now resurrected Sammy Citroen BX.

The day finally came for me to collect old number three from Renfrew. And what a day that was. Coming face to face with the old lady. Finally meeting the car which had been talked about so much and which was going to be our project car. And the shock realisation what work lay ahead.

Before I was allowed to drive the car Brian made sure I was aware of a few key points. Firstly, it was a car which was a mere 13 years older than me therefore I must treat it with respect. Secondly it was a prototype, the third one ever made which meant that there were going to be some quirky bits on it which I had to get used to. Third it had no synchromesh between first and second so I would have to double de-clutch (I still don't know what that means) if I wanted to get into first while the car was moving. And finally a speedo which may read out (on the low side) so to watch my speed.

With my ears ringing from the stern advice I had been given I set off with my wife following me in the now commonly termed support vehicle (everyone with a classic car needs to have a support vehicle). The destination for the Rebel was to be its workshop and resting place of Law Village (a mere 30 miles away). Snatching first gear and holding it in place (which is the only way I seem to be able to get first gear in the car) I

pulled out onto the main road and was off. To my surprise and happiness the old lady drove like a dream when you got her going. Yes she was noisy, yes there was a faint smell of petrol seeping into the cockpit, yes she rattled a bit but other than this it drove great. Perhaps too great as I quickly received a panic call from my wife to tell me to slow down as I was doing over 70 mph. (nothing at all to do with the optimistic speedos that Vauxhall fit to their modern cars? Ed.) I had wondered why I seemed to be passing everyone. And yes the speedo was only reading 57. That's when I remembered that the speedo may read out... not half! Reaching the safe harbour of Law Village, I parked old number three into her dry, warm and well laid out resting place, my garage. Across the next few weeks I set to work laying out my plans for restoration of the old Lady.

The first task was of course to fix a small petrol leak (I knew I could smell petrol when I drove it the first time). This leak manifested itself fully the first time I took the old lady out of the garage to let her rest in the sun as she promptly poured petrol out all over my drive. A quick call to Brian and a new pipe was sourced, generously donated as it turns out by Dennis from Michaels of Selby. A trip to my local Vauxhall garage saw us also "blagging" some fuel line clips for free. Ten minutes later under the guidance and supervision of Brian, old number three was back on the road without the fuel consumption issue she had before.

My next task was to restore the paint work as best as I could. There was nothing I could do for the cracks in the paint (other than cover them with some red gaffer tape) but I was confident I could breathe life into the oxidised red paint work. Being a car enthusiast I had an array of cleaning products and polishers which I quickly set to work with and which did not include any T-Cut despite Brian suggesting otherwise (T-Cut is a very abrasive paint restorer which I strongly recommend that you never use).

- So first I Clayed the car which takes years of paint contamination by road dust, brake dust out of the paint. This took about 4 hours to do in total.
- Then I treated her to a course of IPA cleaner (commonly used on PC hard drives but when diluted helps remove old wax and contaminated oil from tired paint). 1 hours work.
- Then it was time for the machine polishing stage one of which is cutting the paint. 6 hours work.
- The next stage of machine polishing the paint is to use a lighter pad with enriched wax to fill, seal and mask the paint imperfections. 8 hours work
- The final stage of my machine polishing course was to gloss seal the paint. 6 hours work.
- The final treatment was a metal polish, a good vacuuming out and some tyre shine chemical. 1 hours work.

So, a mere 26 hours later (done over several weekends might I add) the Rebel was finally polished up to perfection, or as close as it was going to get, ready for her trip to the AGM of the ROC.

I am glad to say that on the day, old number three got the attention she deserved. It's great to see a car which is now pushing 46+ years can still turn heads and gain a lot of interest.

As for me and project Rebel... Well I have now been working with Brian in rewiring parts of number three, changing a timing cover and front crankshaft oil seal, fixing the air filter, getting her roof lining renewed, and window rubbers renewed too (thank you Phil). Draining the coolant and replacing it, spending hours trying to fix a door, fitting new seals (weather strips?) to the driver and passenger doors, and driving old number three to some classic car events... but these tails of happiness and joy can wait till the next issue of the Mewsletter. After all, that was the point of us getting Number Three in the first place.

Colin Barr - No. 868 from Law in Lanarkshire

Old number three update

Progress continues to be made, or are we just fighting fires? Having passed its MOT in June, with words being said about an oil leak, (we duly fitted a new front crankshaft oil seal) an exhaust tail pipe in less than perfect condition, (I am trying to find someone who can bend stainless tube that small a diameter without taking the car hundreds of miles, unless Adrian can find the one he might have?), headlight aim (my tester always complains about headlight aim, though there is work to do here, instead of using metal clips, the

headlight bowls are just held into the body with self tappers which have stripped the fiberglass, which is too thick to fit the metal clips to, a situation to resolve here as you can adjust the headlight in the bowl, but the whole assembly is not as secure in the body as it ought to be), and a slight rear brake inbalance, so, work to do before next June. Then we encountered electrical gremlins while at an ROC (that would be the Reliant Owners Club, not the Rover Owners Club, though there were some tidy Rovers at the event too!) meeting at Bo'ness, home of the Scottish Railway Preservation Society.

Colin (my son-in-law, in whose garage the Rebel usually lives these days) fitted new fuses, but to no avail.

So, Colin duly brought the car to Renfrew in July, and on Tuesday the 27th I took it to Paisley and my old friend John's garage (he has a big well equipped one, and a lot of experience) and set about making things work again. The main problem turned out to be old age, and cleaning up (with fine emery paper) and coating the spades on the fuse box with Vaseline, soon had most things working again, though only very briefly in the case of the indicators. That turned out to be four and a half decades of deterioration in the (Regal, dash mounted type) indicator switch, a bit of a pig to remove, but we did, cleaned it, and it works now – though the warning light has gone on the blink, well, it no longer blinks! – or did we just disturb it?)

One feature the car has that I had been blissfully unaware of is that the front indicators are in fact stop tail light units with orange lenses, twin filament bulbs! I would wonder "Why?" but remember, this was a Reliant prototype, I guess they just used what was to hand!

So running maintenance, and some use, but are we actually making progress? Well, the new headlining that Phil kindly made and fitted has been much admired, along with the new window rubbers and retaining strips, and the new door seals not only look great but keep drafts down and rain out, so yes, we are making progress. The polish that Colin has got on the less than perfect paintwork is a mixed blessing, my hand just slides off it when I lean on the car to keep my balance, and you have no chance of a paper cup resting on the gently sloping bonnet, but it is sparkling. We even painted the radiator matrix black when we had it out to replace the front crank oil seal – it had quite a lot of red overspray on it from when the car was resprayed in 2004. We even moved the horns to sit, exposed to the elements, behind the grill, to give us clear access to the steering box filler plug which had been obscured by them, and at the same time we re-routed the horn wiring and tidied it up.

The car has been to two car club events in three months, with another one planned in August, so yes, progress is being made, on a number of fronts, not the least of which is teaching the younger generation about our wonderful wee cars. Wheels and tyres are soon to be the subject of attention, we like the original wheel colour, the ones on the car are black, and the hub caps are both rusty and not a matching set. Now I happen to know that Phil has some of the paint he used to paint his Rebels' wheels left, (a very good match to the original colour) and you can still buy those hub caps – but finance is coming into this, there is plenty of tread on the (old) tyres, and while the front pair match, the others are all quite different tread patterns, a fact that I feel might explain the oversteering tendency on left handers in particular.

Unwisely as it happens, I filled it with fuel the other day, only to discover the following morning that there is a leak when it is full and facing uphill – something else to investigate – probably a perished or badly fitted filler hose or corroded filler pipe, the war continues...

Oh, we did treat the car to a car cover the other month – it was going to be outside for a few days, we didn't want bird droppings on that gleaming paintwork! – the firm that do the best deal on these has a Glasgow based U.K. distributor – yes, I let the youngsters "surf the net", to find the best deal, compared notes with Phil, who had bought a similar thing last year, then saved the p&p by going to Rutherglen to collect it, it is the same type that Phil got for his, so we can recommend them, they will fit a Kitten, and no doubt the Fox too, though someone to confirm that would be a useful check. If you have the facilities, it is the small one in the range offered at :- Motorlicious.co.uk *Or give me a ring*, Brian



One of the unusual features of this Rebel is the radiator mounting, you can see clearly here the bracket that has been welded onto the cross bracket that mounted the rad in the production models, just below and in front of the crankshaft, if you look very carefully you can just see part of the correct' mounting hole to the immediate left on the 'new' bracket. The other production rad mounting hole (not used on this car) can be seen just in front of the left hand side of the alternator pulley. I'll show you the – awkward – passengers side rad mounting hole another time!



We have yet to fit the electronic ignition kit (the box on the left wing) and you see the freshly painted radiator. Can't think why I can't see the new spring tensioner!



Observant enthusiasts will spot the redundant mechanical fuel pump, must remember to get a blanking plate and remove the old pump, I often wonder how much energy is wasted cranking its operating lever up and

down aimlessly! Frustratingly I had forgotten that the by-pass hose, thermostat housing to water pump, is no longer available, I had not been as gentle removing it as I might have been had I realised we would need to reuse it! Oh, there's that other rad mounting hole, the small one, just behind the steering drag link, almost looks like a speck of paint, very close to the edge of the chassis flange that goes over the drag link.

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

Moving on a little, Jim Smith has made a decision regarding the fate of his two Kittens. Jim has I know spent many heart searching hours on this, but it has been over a decade since either of them ran, and he needed to make some space, one had a particularly rusty chassis – so, I collected a car load of parts in July, and after he saw how much space that freed up he kindly offered me a lot more – so my lock-up is even more cluttered than it has been for a while, and – this is the relevant bit – there are a couple of engines and gearboxes – and we want to take the engine out of the Rebel to overhaul it, but don't want to have the car off the road for any length of time – so, how to know which engine us best, indeed if either of them is operational after over a decade of lying in a shed. As a result I had tried to stir up some enthusiasm for an old idea, namely to make an engine test bed.

I included a select few on the circulation list of that proposal, including Richard, who lives in Dublin at the moment, but is over here a few times a year, and has a wealth of knowledge and experience – these were his thoughts :-

Don't need to use the Rebel as a test bed. Just the car it is destined for. That's what I did when I got three random engines for the brown Kitten. First one was a complete dud - knackered back main bearing. To test two or three engines - don't bother. To have a line of building up and testing you can kind of justify it then. I can see that it'd be good to know if it'll work when fitted, but a no-load test frame isn't going to tell you how long it's going to last either. If someone has engine trouble they can either pay pennies and risk-it-for-a-biscuit and try an unknown second-hand engine. Other than that it's time to part with the folding stuff. My experience of second-hand engines has been poor. So I'd rather spend the money fixing something properly and have done with it.

If you want to know if an engine has got a chance. Hook it up to a starter motor and do a compression check. Other than that, pop the sump off and have a browse at the bearings. I think those two things would say enough about the engine without going too far.

Richard



Seats in Fox.

Bucket seats fitted like Keith's (Mewsletter 94 pages16/17)

However we must have different seat frames (after slight adaption) as mine still uses the existing wood supports and tilt forward as per originals.

Angle iron was used welded to frames across front & rear for rear for support & front tilt.



Thanks for the update and pictures Les

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

Martin Seymour told me, last August, that he was about to let his Kitten take him to France. Martin, I know you are back, did you manage to take some pictures of the car over there?

Readers Letters

Dear Brian,

20 July 2010

I enclose some Kitten literature that I shall no longer keep. I have sold my Kitten LVY 250T, Chassis number 8A/10/14702961, Engine 8A/85/104343 and you will be pleased to know that it has gone to Peter Wellington of Plymouth who is already a subscriber, and he is doing what I had become too old to do, namely rebuilding it.

Naturally I could not be more delighted that it has gone to be treated in this manner.

Although the Works Manual has gone to Peter I still have the full Parts List in excellent condition as every page was kept in clear plastic covers. It is available for a sensible offer plus carriage. Meanwhile I shall remain in the Register for a while and also wish to thank you for your sterling work maintaining it as you have.

All the best, and may you both keep as well as you possibly can.

Peter (Heming) - Newquay No. 178

-.~.~.~.~.~.~.~.~.~.~.~.~.~.~

Alan Osborn, motivated by Les Smith's article on sun roofs last time, was quick to point out that Les is not the only Reliant owner who enjoys the benefits of such a device, and kindly sent me this picture :-



Please note the lovely sun roof, as fitted by Les on his Fox last month. Wonderful piece of kit, until you leave it open when it rains! Also note the 'boy racer' black bonnet and the sexy black rear windows!!

Cheers, Alan

Lyn Rodden's DEMENTIA QUIZ

First Question : You are a participant in a race. You overtake the second person. What position are you in?

Answer : If you answered that you are first, then you are absolutely WRONG! If you overtake the second person and you take his place, YOU are in second place!

Try not to screw up next time. Now answer the second question, but don't take as much time as you took for the first question, OK?

Second Question : If you overtake the last person, then you are...?

Answer: If you answered that you are second to last, then you are..... WRONG again. Tell me Sunshine, how can you overtake the LAST person??

You're not very good at this, are you?

Third Question : Very tricky arithmetic! Note: This must be done in your head only. Do NOT use paper and pencil or a calculator. Try it.

Take 1000 and add 40 to it. Now add another 1000 Now add 30. Add another 1000. Now add 20. Now add another 1000.. Now add 10. What is the total?

Did you get 5000 ? The correct answer is actually 4100. If you don't believe it, check it with a calculator!

Today is definitely not your day, is it ? Maybe you'll get the last question right... Maybe...

Fourth Question: Mary's father has five daughters: 1. Nana, 2. Nene, 3. Nini, 4. Nono, and ??? What is the name of the fifth daughter?

Did you Answer Nunu? NO! Of course it isn't. Her name is Mary! Read the question again!

Okay, now the Bonus round, i.e., a final chance to redeem yourself:

A mute person goes into a shop and wants to buy a toothbrush. By imitating the action of brushing his teeth he successfully expresses himself to the shopkeeper and the purchase is done

Next, a blind man comes into the shop who wants to buy a pair of sunglasses; how does HE indicate what he wants?

It's really very simple. HE opens his mouth and ask for it... Does your employer actually pay you to think?? If so, Do NOT let them see your answers for this test!

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

Malcolm Glasper is rebuilding one of his Kittens at the moment, and when he asked me for some parts it made me realise that there are other bits we perhaps ought to be thinking about keeping in stock. These include side window rubbers, brake back plates, clutch cables, even, though we have talked about this before, windscreen rubbers – the problem with them being that only 1 person answered my query about how many of you have toughened ones and how many laminated, because it is a different rubber and we can't afford to stock both!

There were various other small bits on Malcolm's list, like the three rubber mountings for the heater, number plate lights, a 5 bladed fan – now, this side of possibly a Kenlow I was not aware of a Kitten having anything other than a 3 or 4 bladed fan, were you, and can you help with any of those other parts?

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

Technical times

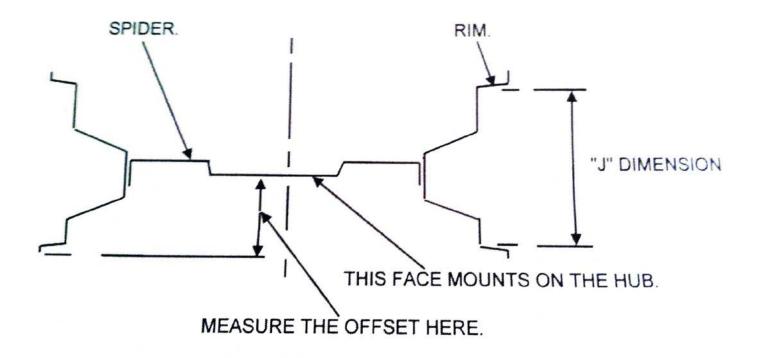
A wheely good story.

I was asking Adrian Hanwell about Rebel wheels the other week, and, having a number of wheels, he asked me to clarify which ones were Rebel – ahh, a "This'll separate the men from the boys" question if ever there was one. How do you tell a Rebel wheel from any other 12" wheel, particularly when there might be Regal ones in the vicinity? And just what have spiders got to do with this anyway?

Telling a Rebel wheel from another wheel I used to think was easy, but doing it over the telephone, or even by e-mail does become a bit of a challenge – Adrian to the rescue then (damn clever these engineering types). It all comes down to measurements, but just how and what do you measure? – it's all very well saying here to here, but there are so many rounded edges that a measurement, unless we are very clear in the description of how to measure, can vary by nigh on half an inch – don't you just love the way in this metric day and age how "they" still talk of wheel sizes in inches! $\frac{1}{2}$ " is just over 12mm to you youngsters.

A clear understanding of how a (steel) wheel is made is always a good place to start – Adrian to the rescue then, here is the drawing he kindly sent to help me define things clearly. I should say I had just had the tyres removed from 3 old, pretty good Rebel wheels, and tyres, but 2 of the tyres were crossplies, probably 30 or more years old, and the other a unique (within my collection of about a dozen) tyre pattern. The wheels were all original Rebel colour, save 40 years of fading.

SECTIONAL DIAGRAM OF A CAR WHEEL.



Now I know I am making a meal of this, but my rule is not calibrated from the end (beginning if you will) there are a couple or three mm of plain uncalibrated steel at the start, so, I can't just sit the wheel, outside face down, place a straight edge across the inner rim, and measure from the hub mounting face of the spider to the straight edge, well I can, but I need to take off the uncalibrated bit at the start of the rule from the figure. Likewise, placing the wheel inner face down and trying to measure through the hole in the middle is difficult because of the significant radius on the lip of that hole in the middle. In short, the offset, that distance from the hub mounting face to the inner rim, is somewhere between 3 to 3 $\frac{1}{2}$ ", not very precise!

Trying to measure the "J" dimension has similar difficulties, because the angles are not right angles, and so the faces taper, do we measure in the middle, or at the narrowest point, or the widest? In any case the changes in direction are not instant, the turns (bends in the metal) are just that, bends, and so have a radius you need to know how the industry measures these things if you are to be able to make sense of it all and be able to communicate effectively. Thanks to ADRIAN, I NOW KNOW THAT YOU MEASURE IN THE MIDDLE OF THE TAPER!

Here endeth my confusing thought of the day – do feel free to enlighten me further. - Ed

Some 'tuning' musing.

First a little of my Reliant background, just in case you have forgotten or are new around here. I have been trying to get just a little more 'go faster' from the Kitty engine for some 25 years now. We have had Piper road cams, balanced bottom ends, gas flowed carbs, electronic ignitions, electric fans, gas flowed heads, gas flowed manifolds, and various other little things that did or didn't work.

I then bought a new car (old ones' chassis died) so now I am back to a standard cam and bottom end, but with all of the above other bits and a Reliant 4 into 1 exhaust manifold. This left me with an engine that

sounds good, and should have performed reasonably well, but didn't. As this car has 12" wheels it is a little higher geared, so it was a bit down in performance anyway (so I thought). I then started musing about a very slight off beat in the engine. Bear in mind I am looking for this last smidgen in performance without spending any money! And obviously a really smooth sounding engine must be doing the business on all four cylinders properly. (I heard Paul Wheatley's the other day!!) I have managed to check that the ignition was spot on all four cylinders so this left us with compression. Bear in mind I have not had this head off (yet!), so I can't vouch for its balance re compression between all 4 cylinders etc. I had checked the compression several months ago and found number 4 was down by 10lbs. Not a lot, and not a lot to worry about.

Now the plot thickens, I recently had to do a 40-mile trip to work for a couple weeks. The poor little car got well thrashed - I now find that with the 12" wheels you just hang on to the gears a bit more, 65 even 70 in third and Kitty is beginning to move! After a couple weeks of this I am listening closely and notice that the slight off beat seems far less – gone even? So check compression - Io and behold, all up to 210lbs, so number 4 (which was low before) seems to have sorted itself out, the car moves quite a bit better, sounds a bit crisper too. We also remind ourselves that this engine has only done some 20K since being rebuilt, and I get the impression that previous owner was a bit careful. So a bit of 'training' (running in) seemed to be needed!

I expect some of you are thinking I need to be put down for cruelty to Reliants (probably right). If I had a really fast car the trouble is I wouldn't have a licence for long, nor would I be happy with the petrol bills. As it is, filling Reliant petrol tanks, even in this day and age, doesn't cost much compared to some.

Further thoughts on the use/abuse of these little engines. Over the years of ownership a little buying/selling has gone on. One engine sounded odd, not liable to fall apart but odd – so I took the rocker cover off, and everything was covered in black gunge! We then reminded ourselves of its previous owner, a mother on the school run, 4 miles each way for several years, oil changes? don't be silly. So we had an engine where the oil had hardly ever been changed with more than its fair share of water as well. Hmm.

Next engine was in a Fox that a friend of mine (experienced Reliant owner/tuner) bought from some 150 miles away, proceeded to drive it home. He did get home but the engine nearly didn't, bottom end bearings all shot out. He stripped the engine, found the dead bearings etc., but could not find any reason for the failure. Eventually I stripped the oil pump, oh my gosh, how can oil get through all that gunge? Answer, it can't. Again it seems a lack of oil change and several years of said (ab)use kills the engine just as well as those that give them a good thrashing. I expect most of us Kitty owners in this Register understand the engines a bit and don't do the school run without giving the car a weekend purge to the seaside! Do we? Low mileage engines? Don't mean too much if it hasn't been treated right i.e. regular oil changes and well warmed up. Anyone else got any thoughts or stories in this vein?

ALAN (Doesn't live in Thetford.) - but close! Ed. No. 295

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

Dear Editor,

I write with regard to the "Getting Technical" article on page 23 of the Sep/Oct issue of the "Mewsletter", where a question was asked about testing, or measuring fuel pump pressures. There are several ways to do this. They are as follows:-

1). If the fuel pump is already fitted to a working engine, simply disconnect the fuel pipe from the carburettor, connect a "T" piece and short piece of pipe between the carburettor and the fuel pipe end, fit a suitable pressure gauge into the "T" piece and run the engine. The pressure gauge will pulse around the working pressure of the pump.

2). If the fuel pump is not attached to an engine, simply connect a fuel line to the input port, wear protective gear (for safety) dip the end of the line into a

container of petrol and pump the lever until the fuel flows out of the output port, to prime the pump with fuel. Once the pump is primed, screw a pressure gauge into the output port and operate the lever again. The pump will pressurise the gauge and the value shown will be the maximum pressure which the pump can achieve. If the pressure falls off RAPIDLY then the valves in the pump are leaking and you might not get sufficient fuel flow when you fit this pump to an engine.

If you want to reduce the pressure of a fuel pump, obtain a weaker spring, remove the original one from the pump and replace it with the weaker one, then re-test as before.

Adrian Hanwell. from Brentwood - No. 167

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

On the subject of brakes, where I was seeking guidance, Alan Osborn replied 8/7/10 to a query of mine as follows, Ed. :-

You already have the definitive story from me time before last. A picture is what is needed, easier to understand and useful for future reference. I have just checked the manual, the front brakes are totally handed, brake plate and cylinders, so when you come to fit shoes you can't get it wrong. The rear brakes are a different matter, the plate and cylinder and adjuster are the same both sides but the fitting of the shoes makes it handed IF you want the shoes fitted for best advantage and the brakes to work at their optimum efficiency. A drawing or good picture with a proper explanation is what is needed please. AO

Now obviously, had I been on the ball, there would have been no need to publish that, instead I would have published a different text, along with the appropriate pictures or drawings – feel free to contribute! Ed.

Parts

The last steering rack we supplied caused some concern, apparently the threads on one of the track rods were in less than perfect condition, and the man doing the installation had some difficulty, not possessing an appropriate die nut with which to clean up the thread, fitting the track rod end. I remember a square thread file a friend had which was made specifically for that purpose, so, like most things in life, there is more than one solution out there.

It occurred to me that I ought to introduce another operation to the rack refurbishment plan – or then again should I just buy some nuts and ask Alan to fit them, you know, to act as lock nuts for the track rod ends – at least if they were on there the fitter could remove them which would clean up the end of the thread before fitting the track rod ends. I think that the damage was likely to have occurred during the lubrication operation – I have on one occasion loitered in the vicinity when he does them, and was horrified at the procedure – putting one end on the ground – none too gently, and leaning hard on the outer casing to make the rack move very quickly from one extreme limit of travel to the other. This clearly could damage the threads on the track rod in contact with the concrete floor – so, just ask him to clean up the threads as a final operation after lubrication is complete and the boots on and tied off. But, my man had not used his imperial die set for years, could not find it, then remembered loaning it to someone but could not recall who – it wisnae me, honest mister! –

Having said all that, am I trying too hard here? That is, from memory, the second time in a decade someone has complained about the threads on a track rod of a reconditioned rack, perhaps the problem arises so rarely I really do not need to do anything – hmmm, I wonder.

I elected at this point to resort to modern technology and text a few people to seek advice. Time moves on, 20 or so years ago I would have been within walking distance of at least half a dozen engineers who had such things in their workshops or toolboxes, but no more. I was really struggling. Fortunately one of my texts brought a reply "You could try me" from my old friend John Sinclair in Paisley, a few miles from here, I was in the middle of texting him back to ask when suited him, when he rang to say what was I doing this morning? He looks after his granddaughter Monday Wednesday and Friday mornings, but was free today 13/7/10, so I went over – thought we had a problem as the appropriate space in the old steel die set case was empty, but that turned out to be because the die we needed was in the wrench! It was pretty pointless in the event, as the threads on that particular rack were fine, the die nut whirled up and back no bother at all – we even cut some short lengths of old rubber tubing to push over the ends of the track rods to give added protection. So easy with the right tools!

All this extra time and mileage makes me wonder if I need to take this into consideration on the cost front, it did involve me in 7 miles with a cold engine on a day that I had not planned to use the car at all. I'll try and tie such checks in with something else next time – said friend has a tyre removing tool, and I need some old cross plies removed from a set of rather good looking Rebel wheels – hmm, if only I knew when next we will have someone in need of a rack!

On top of that, some Mini track rod ends are apparently longer, i.e. there is insufficient thread on a Kitten rack track rod to make it possible to do the tracking, i.e. the front wheels both point out – a lot! So, again, do we alter the rack refurbishment programme, or learn more and be more specific than saying "The track rod ends are Mini"

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

Sales and Wants

Hi Brian, I've just acquired a load of brake shoe retaining parts i.e. the spring cup and pin for the front and rear brake shoes. Rears are £4.65 per complete axle Fronts are £5.25 that includes postage. Fronts have 4 extra cups. Regards Phil .

Kitten exhausts, in stainless no lees, a three part system (makes for simpler transport) are currently available from Dinky Cars for £180, plus delivery, Steve Preston is the man.

Peter Heming has a the full Parts List in excellent condition as every page was kept in clear plastic covers. It is available for a sensible offer plus carriage.

Rare one this, I have a set of Kitten black reclining front seats, and matching back seat, may be able to deliver within 20 miles of the M6 / M1 in September! Brian

Well, a number of compromises were made this time, I swithered about putting another A4 page in and enlarging the pictures of the Rebel, or even removing Lyn Rodden's dementia test, but the covers arrived yesterday, and I am keen to get this to the printers asap – it is now Sunday August the 8th, I plan to take the Volvo to South Queensferry next Saturday with the Jowett people - I have been offered a ride in the parade in a Jupiter – and the Rebel to Biggar on the Sunday.

I am concerned that I have misplaced or forgotten about an advert or two, there are so few. I hear of more and more cars on e-bay, indeed one was sold that way last month by one of our subscribers to another – both living in Scotland! Prices happily seem to be on the up, creeping ever closer to that magic £1,000 mark.

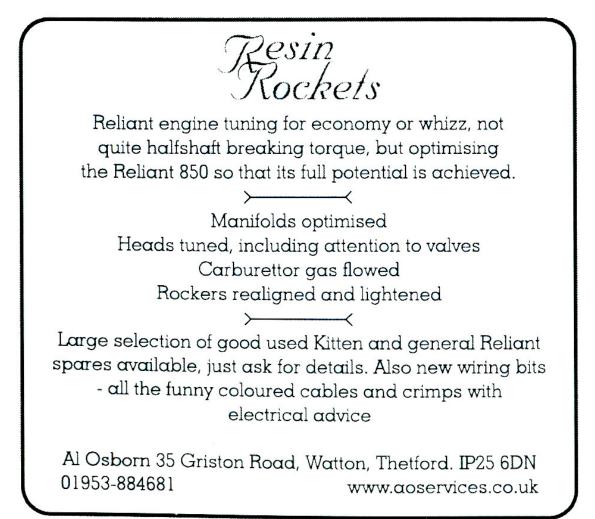
So, enjoy the rest of the summer, our venue for next year's get together to celebrate 20 years of this Register has been booked for Sunday July the third, so get that in your diary now – and if you have a diary for next year already, you are far better organised than I am!

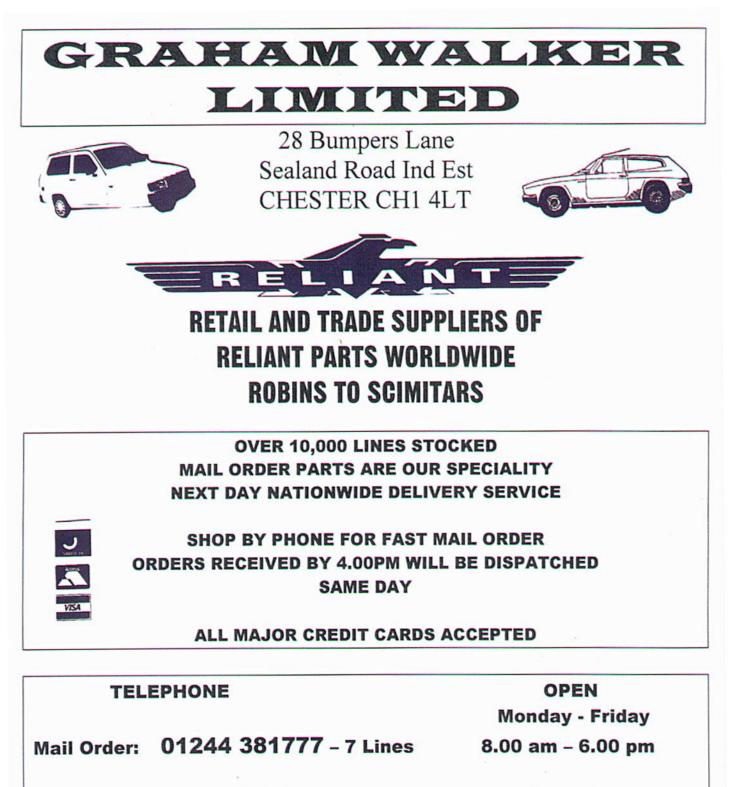
Oh, by the way, just edited this after proof reading, it occurs to me, why re-invent the wheel? A very convenient lightweight engine test bed might come from an old Angus fire pump – anyone got one lying about by any chance? (the frame I mean!)

O.K., ball joint greasing and general good maintenance practice apart, I think that's us for this time. Oh, if you can, some input for next time if you please.

Till then take care,

Briau



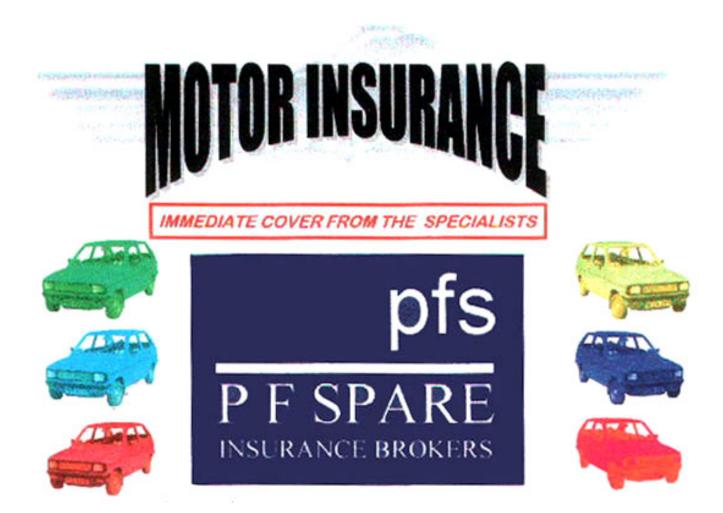


Fax No: 01244 381262

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



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

Authorised and Regulated by the Financial Services Authority