

Reliant Kitten Register

MEWSLETTER Thirty-Four

May/June 2000



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

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The Reliant Kitten Register

MEWSLETTER No. 34

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

Rebel alternative parts *contact Brian*

Kitten alternative parts *contact Brian*

Fox alternative parts *contact Brian*

Our Mutual Aid Spares scheme is run by *contact Brian*

Mewsletter pictures *contact Brian*

This time we have decided to treat you to a Liege, yes, just to prove that there is more than one, we chose one of a different colour this time! This one belongs to Dave Holroyd of Darwen in Lancs. and is chassis number 17, just the third one to pass its department examination in February this year. Well done Dave, makes a change from all these Ginettas what! (Dave runs a business looking after and supplying parts for Ginettas you see).

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

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

Hello again, aren't those long nights great? (He said in March having just sent the Mar / Apr edition off to the printers, and already this edition is 10 pages long, and I still have most of Simon Chisholm's article to type up!).

What about that Tempest on the front cover last time? Just how is he going to maintain that kind of quality I wonder!?!

Right, I must get on with the Jowett stuff for a day or three, talk to you again soon. Oh, thanks for your help with those Jowett raffle tickets, a truly wonderful response, we sold over 1,000 tickets, and I could not have done it without you. Thanks too to those who returned them promptly, sold or not, it all helped me out of a difficult situation. We did get a mention in the event programme under "Acknowledgements" for our efforts, so the Jowett guys appreciate your help as well as me.

Those of you who wanted an alloy rocker cover should have had it by now. If not, (and I suspect that I have missed a Tempest one out) or if you would like one, please get in touch. We despatched the 8 that were sold, on the 8th of April. Thank you Brian Millar for your invaluable assistance with these, and my apologies to everyone concerned for the long delay, you wouldn't believe the trouble I had with those chrome tube nuts.

Keith Gittus was on the telephone on receipt of edition 33, pointing out to me that if I could not picture the throttle mods that he recommended in the previous edition, that I ought to look at page 74 of the Heynes Kitten / Robin manual, and all would be revealed, and if I get the time to check I will let you know the page number to look at in the Kitten (factory) manual, mind you, it probably won't show the Robin arrangement! Thanks Keith for keeping me on course.

I was kept pretty busy after my offer of back numbers of the magazine in the last edition, and, now that I am down to my last few copies of most of the early editions, am considering just keeping them on disk in future, and printing off any that are required as necessary. The down side of that decision is that the covers are a problem, but I will make an executive decision about them in the fullness of time!

I was slightly surprised, but delighted, to learn yesterday, that Reliant have just had a small batch of Kitten propshafts commissioned. They will be in stock by the time you read this. Their progress on the front damper situation however is slow, but on going. I can still supply front dampers if you need them, Ed.

On a completely different front, a number of us have computers these days, and a number of those individuals keep asking me when I am going to make better use of this modern technology. The fact is that quite a number of us do not have such equipment, nor indeed any desire to have such equipment. So I once again have a dilemma.., nothing new there I know, just another executive decision to be made !

A couple of those people, the computery ones, are keen to set up a more comprehensive web site than the old page that I have had there for some years past. Richard Plaxton shines through here because he (silly man) actually put his ideas in print (well he e-mailed them actually, but Arleen has a printer, and produced hard copy for me, so I do have it in black and white Richard!) Richard mentioned that he was prepared to go through the magazines, yes all 34 of them, and archive, and I think he meant index as well, the articles contained therein. Well, that would be very nice Richard. Yes, the experience of creating a web site, and doing the work you suggest would I agree look good on your C.V, and at worst has to be useful experience for an active young mind. For the benefit of the rest of us, a report could be produced from this work, so that those of us not 'on-line' can also benefit from Richard's efforts. Please keep us posted with progress Richard.

The one problem I can see with all this information roaming about 'out there' is the question of who polices it? I was asked some time ago to check over for accuracy the content of a fairly large web site for a German chap, Chris.. Oh I can't remember his second name (another of those individuals who knows of our existence, and expects my help, but does not see fit to subscribe, and so is not on the database) how can I be expected to remember?

At the time I had so much else going on that I didn't have time to do it, and while it was flattering to be consulted, it really is not my responsibility. I seem to remember it was Reliant in general, and not Rebel / Kitten / Fox specific.

There are a number of other individuals, not all subscribers, who have expressed the desire to set up a web site, one for Rebels I remember from last year, but again I can't remember who it was.

I am quite sure that it is only a matter of time before the Mewsletters find their way on to the Net, but it is my intention to keep snail mail alive and ticking over for many years yet. (Snail Mail is what the Post office used to do, and a task currently carried out by the Royal Mail, you stick a stamp on an envelope, drop it in a dark hole, and days later it gets there) Any presence we are given 'out there' will be in addition to the re-cycled tree limbs that will keep dropping through your letterbox half a dozen times a year.

Having said that moves are a 300mm (no, that doesn't roll off the tongue like 12" did, does it! Oh dear, he's put his foot in it again) to offer the back issues of the Magazines on CD ROM, and one upside to that idea is the improved picture quality of the front cover pictures on the early editions that might be possible as a result of all this technology.

What will all this cost, I can hear you thinking, well the fact is that it will cost a lot less than having to reproduce them on paper, and the postage costs of a CD is, at 26p, a lot less than the nearly £4.00 that it currently costs to mail all the back issues! A CD costs under a pound these days, and one of them could contain, I don't know, some of you experts can tell us, but I would guess, given the average size of a magazine, we could get 100 editions on the one CD easily – makes you think...

The fact is that while there are savings to be made, and perhaps more importantly, the chance to improve quality, it is all extra work that I do not have the time to do (what was that about old dogs and new tricks dear?). As I said before, I will be supporting snail mail for a very long time to come.

If we ever get to the stage where the vast majority of subscribers are on line, then I will not be adverse to learning more, I guess that is another mod I need to make to our renewal notices, a box for your e-mail address, more work!

Oh, I really must move more quickly, if only to keep my desk tidy! Stephen Campbell, one of our most recent subscribers, writes to tell me that Sportsman Limited have not only acquired the moulds and rights to the Tempest, but are busily producing new jigs and drawings to enable the car to be offered in any form from a set of plans, right up to turn key cars – watch this space.

Talk to you again in August.

Brian

REBEL ROUND UP

Dear Brian,

12th March 2000

Please note that I am now the owner of Reliant Rebel estate UJY 304L. I collected it yesterday from Penzance, a round trip of just under 600 miles. It was quite an uneventful journey apart from the exhaust down pipe parting company from the manifold about 10 miles from home!

For those who were at the Land's end to John O'Groats run a couple of years ago, this is the cream Rebel estate car that came to Lands End to see us off.

The Rebel has been named 'Eugene' by the enthusiastic side of the family, but 'UGH' by the less enamoured! The car requires quite a bit of work doing to it. Hence this epistle which is to pick your brains on a number of things which I hope you may be able to help me with. *I did reply to John in some detail at the time, but if you have any knowledge or ideas which may help him, do get in touch please, Ed* I have only been a member of the Register a short time, so please excuse me if the answers have already been provided through the pages of the Mewsletter. *Time for a plug about back issue availability I wonder – Ed?* Where am I likely to obtain the following parts?

Speedo cable
Locking petrol filler cap, body grommet and filler hose
Exhaust down pipe - preferably in stainless.
Driver and passenger silent door runners
Door handles
Gear lever gaiter.

The car has a 750cc engine fitted at present which is on its last legs. It only maintains 20 / 25 p.s.i. oil pressure at speed, and nothing with ominous green light on, at tick over. However, to its credit, it did get me home!

I have also acquired an 850 engine complete with SU carburettor and alternator. Changing the electrics to alternator from dynamo I think I can sort out. Can you advise me on the problems I can expect when fitting the 850 cc engine in place of the 750?

I noticed when washing the car that the front windscreen and side windows rubbers were causing the water to run almost black. Is this simple an effect of normal ageing, or something more sinister? Do the rubbers need replacing? and are they available?

Do you know anything about the "Rebellion" the newsletter of the Reliant Rebel Register? It was published by a Mr. T. Howie. I received three copies in 1982, and then nothing more. I still have the magazines – nothing gets ditched in my house. It would be interesting to know what became of the Register.

That's all for now, thanking you in anticipation.

John Unwin - Reading

Thank you John, as you will gather, time has passed and John's situation has developed, mind you I have yet to look out the copies of the later editions of the "Rebellion" that Michael Bentley produced for Terry Scott, one of those days John, just give me a couple of months! If anyone can help with any of the bits John was needing, do get in touch with him, I know that some of the situations have been at least temporarily resolved, but do feel free to help the man. He can be contacted on 0118 9540725.

As to what became of the Register, that is a long, and I suspect never ending story, though it is probably time that I documented it, anyone with any input please feel free to help me here – Adrian – Bob – Michael et al....

FOXES DEN

Oops, it's gone all-quiet, I know that Foxes are shy, (well the ones that Moira feeds outside our front door every night are), but talk to me people, what is it they say – use it, or lose it!

Competition Corner

Right, I said we would do this, and here is the very place to begin, so if any of you good people out there who participate in such things would be good enough to take the time to put pen to paper, finger to keyboard, or even voice to tape, I will be happy to keep everyone else informed. I know that Kittens in one form or another are to be found taking part in competitions all over the country most weekends of the spring and summer. Many of them belong to people who do not subscribe to the Register, indeed may not even know of our existence, but compete they do, and to great effect in many cases. To those reading this who themselves participate in such events, or indeed spectate at them, feel free to share those experiences with those of us who simply live too far away from the centres of such activities.

An Invitation

We have once again been invited to Adrian's do at Ingatestone Hall, and for once the notification of the event falls beautifully in line with my Mewsletter publication dates! He writes as follows:- This is just a short letter to invite your members to a "FREE ENTRY" rally which is to be held on Sunday the 23rd of July at **Ingatestone Hall**, Hall Road (a continuation of Station Lane) Ingatestone, Essex, which is just off the A12 near Brentwood. The "**Great Eastern Rally**" has been held almost annually since 1975, and is open to owners of all makes of classic cars (*Yes people, this includes our Reliants, Ed.*) The Rally opens at 10:00am and ends at about 4:30pm. It is an informal rally. No pre-booking is necessary, and admission to the rally site is free for those bringing vehicles, and for all the vehicle occupants. If rally goers wish to visit Ingatestone Hall itself, we have negotiated a discount with Lord Petre. This year the charges remain unchanged at £3.50 per adult, £3.00 for students or pensioners, £1.50 for children over the age of 5, or £11.50 for a family ticket. Those attending the rally will be eligible to receive a discount of 50p per head off the above prices. We hope your members will be able to join us on Sunday the 23rd of July. If they do we will do our best to make them most welcome.

Yours sincerely - Adrian Hanwell.

Daimler and Lanchester Owner's Club, Essex Branch Secretary.

READERS LETTERS

Dear Brian,

March 2000

Just a note to confirm that I do intend parting with the Kitten, but would very much like to support the owner's Register as an associate member. As John Blagburn has mentioned in previous letters to the Mewsletter I am trying to sell the Kitten. Not just sell it, but ensure that it has a good home in the future. It was with much deliberation on both my part, and that of my father that we felt it was time that someone else should enjoy the quirkiness of the Kitten. After all, between the two of us we have owned the car for 22 years, and covered 67,000 very happy miles.

I learnt to drive in that car over 16 years ago, not many people can say they still own the car that they passed their test in. The car reliably took me between Edinburgh and Newcastle for almost 4 years almost every other weekend when I was a student. Even when the car was suffering, I remember once part of the exhaust almost falling off on a journey between London and Liverpool, however, as always, the car managed to get me home. In fact the car never once left me stranded, we always managed to limp back home, sometimes on the proverbial wing and a prayer. My most vivid memory is the time we went to Biggar to a friends wedding, the alternator had failed, but the warning light did not come on! When we arrived at the hotel the car stopped dead, and refused to turn over. The hotel room became a temporary battery-charging centre and we had a nail-biting journey back to Newcastle the next day, knowing that if the car once stalled we would be stranded, as always, the car reached its final destination.

Brian, as I said, it is with much sadness that I intend to part with TEK 229S, but my time these days is so limited, and for the last 4 years I have had a company car in which I cover 25 – 30,000 miles a year. As a result the Kitten sits in the garage without being taken out and run. What I would like is for someone else to share the Kitten experience and build up their own set of memories in the future. It would be terrible to see this car's demise due to a lack of tender loving care.

As a final note it is with great interest that I wait to read the Mewsletter, and all the experiences of other owners. If only the Register had been around 15 years ago when myself and dad struggled to undertake those maintenance jobs on kittens that are so unique due to the fact that the majority of the time you have almost zero space to work in.

Continue with the good work and you never know, I may see you at some event or other as an associate member.

Martin (Blunn) - Whitley Bay

Thanks Martin for that, and of course we are delighted that you want to stay with us – though I do dread the day when we have more associate members than owners in the organisation ! No, that will never happen, will it ?

Nick Nicholls from Mancot in Flintshire wrote to me last September, asking me for a list of subscribers in his area with a view to organising a local meeting of like-minded individuals, and I failed to respond in an appropriate and timely manner. What of course I did do, was leave his letter on my desk in the hope of attending to it, whereupon I could file it with a clear conscience! So, during desk tidying operations in April, it came to light, and I decided that, since his alternative suggestion was that I should ask anyone in the Cheshire or North Wales area to drop him a line to 70, Mancot Lane, Mancot, Flintshire CH5 2AJ. So, my apologies Nick for the long delay, I can finally file your letter, and get on with my desk tidying operation ! Oh, yes, I have heard of the Dolphin, and of a diesel Kitten, and a 4 door version, and, somewhere, I do have a copy of a page from a foreign motoring magazine which shows at least one of these, which one of our European subscribers kindly sent me a year or so back – once again my wonderful memory prevents me from acknowledging the thoughtful individual concerned. Oh, and just before I go, congratulations Nick on getting the Kitten back on the road, I hope it serves you well. Ed.

Dear Brian,

2000-05-03

I bought my Kitten totally out of the blue and it has now found a good home alongside my '72 Bond Bug (which I have owned for 19 years) and my '88 Citroen 2CV6 (which I have owned for 2 years).

It so happens that I met one of your subscribers, Joe Lemon from Belfast who owns two Reliant Kittens, one a blue estate, and the other a blue van, converted to an estate. It turned out that the van was the one I owned and sold in 1988, and hadn't seen for all this time. (Believe it or not less than 500 yards from where I work!). Anyway, it turned out that Gwen Lemon had a dark orange Kitten saloon, and was changing to a newer car with power steering. This little Kitten was always known as "Tiddles", and had been well cared for by Joe. Mechanically and chassis wise Tiddles was exceptional, but the interior had seen better days due to water leaks caused by rotten screen rubbers. The outside needed spruced up a bit as it was patchy, flat and scuffed, but damage free. So I decided to give Tiddles a new home for her retirement and pamper her.

Tiddles is now 70% through her restoration as follows:-

Complete body strip, doors off and all interior trim, dash and headcloth removed. Thankfully there was very little in the way of body repairs needed. She is now finished in Ford Vista orange to match my Bond Bug, and to a very high gloss! Sorry it's not an original Kitten colour, but I wanted Tiddles cheered up from her 70's tan colour.

Many new parts, Head lights, tail lights, indicator lights, screen rubbers, door panels and bonnet to name but a few, all courtesy of Dennis at Michaels, thank you Dennis.

New head cloth and carpet set are being hand made by a local retired car trimmer who only worked on Rolls Royce restorations!

The original seats are being re-trimmed in real leather, a two tone finish of black with vista orange centre panels, the centre panels being specially dyed hides to perfectly match the body colour.

Other additions will include period chrome racing door mirrors, a set of Minilite 12" alloys period chrome roof aerial and a few other bits and bobs. I've had Kitten decals remanufactured, one for the rear and two small ones, one for each side front wing. They also made me a "Reliant" logo with the wings and eagle head to place on the rear panel, not original, but a bit different.

The doors were re-hung, my apologies to my friend who offered to do this job, it took many attempts to get as perfect a fit as possible.

I will send pictures when it is complete. The cost so far, including the £100 purchase price (with M.O.T. till Sept.' 2000) is around £1,300, and another piece of motoring history is saved from the breakers yard. I was only allowed to buy Tiddles on the condition that she was restored, and not scrapped or broken for parts. She came with the original owners handbook, original period radio, original full polished hub-caps, and a spare rear screen.

Alan Doherty – Ballyhalbert, Co. Down, Northern Ireland

Thank you Alan for keeping us informed, I look forward to the pictures, please keep us posted with Tiddles progress. Ed. So, that's us with an Irish Tiddles as well as an English one, this could get confusing!

GETTING TECHNICAL

Dear Brian,

27-2-00

It's the fate of the dodgy chemist. I see that I made a mistake in my letter about phosphoric acid that you published in Mewsletter 32 – page 7. What I should have said is that the treatment leaves the steel with a phosphated surface – not sulphated. The main point is that the phosphated surface does not react with oxygen, and even better, it doesn't let more oxygen into the steel so that no more rust is formed whilst the coating is intact. A rusty surface on the other hand, will let more oxygen through so the rusting continues until all the steel is turned to rust. In this condition the part is over ten times its original thickness, and as strong as mashed potato, but not so good for you.

On the subject of sulphating though, has anyone tried the EDTA stuff? I have used it several times and found it to have no noticeable effect. A traction battery salesman I know tells me that sulphating is seldom the cause of a battery's death; it's usually mechanical damage. Also that a sulphated battery will always unsulphate itself if it's left on a small trickle charge for a long period.
Yours sincerely - Jim Lugsden - Kent

Thanks Jim, for once I have an answer to the question, correct me here if I have it wrong Phil. But Phil Hallam recently used the very product mentioned, i.e. EDTA, in the old battery for his Riley 9, and was well impressed with the results. But this does serve to remind us that not everyone will have the same experience (I believe that the battery Phil was trying to resurrect was over 30 years old, which might be relevant!)

Next I am including some work that Simon Chisholm did for us last year on a report that I had provided from the Register's database relating to chassis numbers, together with additional information from Simon's own experience:-

Reliant 850cc Chassis and Engine numbers 1974 – 85 Explained

The data on Kitten and Fox utilities has been collated from the vehicles listed in the Kitten Register in November 1998. E&OE.

The chassis and engine numbers incorporate the year and month of manufacture. The month code is the same for both chassis and engines, but the year code differs from 1980 on, changing from a number to a letter.

As a matter of interest Robin / Rialto engine and chassis numbers are generally the same month of manufacture, however Kitten engines tend to pre-date the chassis by two months, and Fox engines by one month.

Deluxe and base models are not categorised differently *Sorry Simon, my fault, it is only recently that I have been recording the fact that a Kitten is a DL on the database, so I must apologise for giving you incomplete information to work from Ed.*

All Fox models are based on the pick-up shell, and the variations are not reflected in the chassis numbers. Variations are:- 2-seater with bulkhead (Pick-up), 2-seater without (Van / Pick-up.) 4-Seater (Van / Pick-up, base or Custom, all of which can be fitted with a hi-hard top or a canvas tilt.)

The tables below summarise the components of the codes, and should be read in conjunction with the examples given of engine and chassis numbers,

Year			Month		Kitten Colours	
Engine / Chassis					To May '78 on	Nov.'77
1974	4		Jan.	A	1 Blue	
75	5		Feb.	B	2 Brown	12
					
76	6		Mar.	C	3	Yellow
					13.....	
77	7		Apr.	D	4	Green
					14.....	
78	8		May	E	5	Beige
					15.....	
79	9		Jun.	F	6 White	16
1980	0	A	Jul.	G	7 Red	
81	1	B	Aug.	H	8 Orange	
82	2	C	Sep.	J	9 Turquoise	
83	3	D	Oct.	K		
84	4	E	Nov.	L		
85	5	F	Dec.	M		

Early chassis nos. begin with the year, month & colour, followed by the model and vehicle no's which run sequentially irrespective of body type or trim spec.

SCD Chassis no's commenced November '79, starting with model and colour, followed by year, month and then a six figure vehicle number.

Kittens started at 1001 ('75 August) running to 3276 ('76 July) 2276 cars, re-commencing at 1001 ('76 August) running to 3275 ('81 December) 2275 cars

The earliest Fox on the Register is No. 19 and the latest is No. 601

Spaces have been placed between each element of the number given as examples below for reasons of clarity. The first and last number each year for Kittens in the Register is also given.

KITTEN

Pre- 5HY/10/1001S ('75 Aug)
 Production 5K/10/1009/S
 5J/10/1062 ('75 Sept)

Production 5K3/141 01109

Where the 5 represents 1975, the K represents October, the 3 being Yellow, the 141 means it is a Saloon, and the 01109 being the car number.

5M5/141 01588 ('75 Dec)

1976 Jan – Aug	01698 – 03276
1976 Aug – Dec	01001 – 01673
1977 Jan – Dec	01686 – 02850
1978 Jan – May	02894 – 03024?

1979 Jan	9A14/147 03000
1979 Apr	9D14/148 03035

1979 Nov	SCD 140 7 55 9L 003049
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Engine numbers commence with the year and month of manufacture, and conclude with five numbers on Trikes and six numbers on four wheelers. I give below examples of early engine numbers, and then extrapolate annual start / finish numbers.

40 BHP engine – Red rocker cover

Kitten / Fox		Robin / Rialto	
		4E/ 8 8109	(May '74)
		4H/ 8/ 10538	(Aug '74 Haynes)
5G/ 8/10014	(Jul '75)	5H/ 8/ 25183	(Aug '75)
5J/85/100071	(Sep '78)	5J/85/ 25866	(Sep '75) *
5M/85/100810	(Dec '75)		
6x/85/100839	to 103031	1976	6x/85/ 30 to 40,000
7x/85/	to 104299	1977	7x/85/ 40 to 45,000
8x/85/	to 104400	1978	8x/85/ 46 to 52,000
9x/85/	to 105500	1979	9x/85/ 52 to 58,000
0x/85/	to 105750	1980	0x/85/ 58 to 62,000
1x/85/	to 105829	1981	1x/85/ 63 to 65,000
		1982	2x/85/ 65 to 68,460 (Rialto)
3D/85/106272		(Apr '83)	Fox)
3L/85/106587		(Nov '83)	Fox)

37 ½ BHP HT-E Engine – Yellow Rocker cover

3L\85\10660E		(Nov '83)	
3M\85\106613E		(Dec '83)	
4x\85\	to 10800E	1984	4J\85\74659E (Sep '84 Rialto 2)
5x\85\	to 108075E	1985	5x\85\75,500 to 78,000
6B\85\108092E		(Feb '86)	

POST HT-E

8M\85\108222	(Dec '88)
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9D\85\108244 (Apr '89) Note the obliques change direction.

- Con rods with angled big end caps fitted up to 5J/85/25866 (Sep '75)
5K/85/100226 (Oct '75)

This early con-rod is illustrated in the parts list up to and including the 1983 Fox. Post '75 bearing caps are cut straight across.

Special Note : Distributors and carb needles are not interchangeable between the 40 BHP engine, and the later HT-E engine, which runs at lower revs, whilst giving significantly more torque.

The following information is required please : To up-date the database – see your registration document, or the plate under the bonnet for the information.

Date first registered For Robins 1973 – 79 (Pre SCD No's)

Model

Body type Rialto / Robin 1982–99 No. of seats 2/4 DL, GLS, SE, or LX

Kitten 1979 SCD Nos. on

Chassis No:- Fox, all Canvas Tilt Y/N
Hard top Y/N
Custom Y/N

Colour

Engine No :

Rocker cover colour.

So, if you would be so good as to take a few minutes to dig out that information for Simon, it will enable him to check my details, and gain some additional information at the same time. If I am organised enough I will try to include the addressed postcard for you, but I doubt I will be clever enough to print the form on the back of it ! Sorry Simon, one of these days, I'll master this technology for all our benefit ! Oh, by the way, this would be an excellent time to provide Simon with the Kitten information as to body spec, i.e. tell him if it is a DL or not.(see the form above) I did not ask that specific question on the original form, and while many of you did specify if it was a DL, I did not record that information in the early days. This would be a golden opportunity for us to make my records more representative of the truth. Please, thank you.

There follows, finally!, an article which Alan Osborn sent me on the 1st of January this year.

Some of the Answers

Well, as Mr Marshall seems to want to witter on for half a Mewsletter, then the only thing to shorten him is to supply an equivalent half, and of course in the process answer all his daft questions. *They were not all my questions Al. ! Ed.* First the easy short ones.

The standard Kitten / Robin rear light is 'crap' so badly made not even worth fitting, fit the square Rialto ones, yes they look slightly odd in the curved body, but at least they work for a few years without attention!

Understeer – Oversteer? This is all down to the balance between the front and rear of the car. I think as designed they must have got it about right, but of course there are then production variances and owner fiddlings and bits that wear out! Some critical items are, springs, tyre widths and to a small extent tyre pressures. We assume that we don't have any worn out bits by the way, as if you have, the results could be anything! My van has always had van rear springs, but somehow the front springs fitted at the factory were car springs, this made the front that bit 'soft' and it relatively over-steered. This means it behaved as normal on the road, but benefited quite dramatically the right way by the fitting of a second anti roll bar (on the front). Now we could really steer it by the throttle! But fitting 165 tyres on the rear only, it was far too stiff at the rear, hence would not even drive in a straight line! with of course chronic oversteer. Rear too stiff – front too soft. Changed fat tyres to the front. This looked odd, but now we had the front slightly stiffer while the rear was back to normal. Result – wonderful. So take care with the front rear balance.

Windscreen job – hum, removing the windscreen can be done in 30 secs! and with the junk in your pocket ! i.e. an ignition / door key gets the plastic strip out of the window rubber. The screen then pushes out from inside! Next? Ah, re-fitting, just popping it back in should take a couple of mins, but if you want to fit a new / fresh rubber AND have it watertight, then using the silicon sealant will obviously take a little longer. Can't be as bad as the Rover SD1 I had once, it needed wipers on the inside!

Right, now the real subject to write about, this stalling when the clutch is depressed. When I read this I just thought 'you newcomers just can't get the basics right' But then I realised what was going on when I was driving around later. I was also wondering about this allegation that the throttle response was non-linear. Starting with the latter. I would have thought the throttle itself was o.k. , but the engine does have a characteristic whereby there is naff all real response below 2000 revs. Especially when cold, so you always have to joggle with the choke / throttle loading when cold. OK all engines are like this. When hot you can drive normally i.e. think you have some bottom end torque, provided carburation is pretty correct and perhaps you've done a few mods (I'll come back to them).

A leaky rocker breather pipe will screw up the tick-over, also a part blocked air hole into the float chamber. In theory a leak at the vacuum pipe will also aggravate this. My experience is that ignition timing has nothing to do with it i.e. +/- 5 degrees will go unnoticed at tick-over. Another Brian guess is the manifold alignments, none of this helps the bottom end torque / pickup. But the real problem I believe is

The syndrome is in fact a 'false' tick over, i.e. a slightly out of proper control tick over. Let us start at the beginning, assuming that all the usual bits and pieces are correct, ignition timing, mixture. To set tick over, this is as told to me by a long gone West London dealer. Set for normal tick over, then pressing the clutch lowers revs to the point of maybe stalling, also putting on lights (loads alternator) also slows engine. Increase tick over (with warm engine of course) so that it just maintains a reliable tick over – clutch down – lights on. Obviously then clutch up lights off does bring tick over up a bit, perhaps 700 revs rises to 800. (What do you mean you haven't got a rev counter!!!)? Now you might find that the above procedure can be carried out on a just warm engine, i.e. a couple of miles after choke fully home, but then after a few miles and in warm weather (try very hard and you might remember when) the tick over starts to race. This is the fault condition 'false' tick over. You can prove this point if you ignore this revving up and push the clutch down, engage gear, and even start to pull away without any throttle, should not stall if done carefully. What can't you drive off on tick over with a warm engine, shame. I can continue to make progress in second gear on tick over. (The party trick then is to floor the throttle and go all the way to 55 mph without a cough or splutter, or gear change!) Back to the plot, I have chased this false tick over for months/ several years, engines, cars, carburettors, and finally proved the cause – the carb butterfly wears as it touches the carb body at the shaft. One

reason for this is the pull on the throttle closing spring; this is often not at 90 degrees to the butterfly shaft. Some slight side force then wear the side of the butterfly, this allows air round the side, which weakens the mixture, in turn weakening the tick over. Therefore engine turns over, but has no power when clutch is depressed. To confirm this diagnosis, set the tick over as above, prove that you have the correct tick over that can take the clutch down, and if, when it is let up, the engine starts to soar on a warm engine, then, this is the problem, in a real bad case you can see it getting worse from week to week.

Answer... Strip out the carb and fit a fresh butterfly, perhaps shaft too, as these wear as well, although I've not seen any specific problems with engine control with a worn leaking shaft.

Now, while you have the carburettor off another mod. You must do is to put a 3/8" chamfer on the leading edge of the carb mouth, where the air box fits, i.e. the air box has to be opened up at the same time. You have to mind the air hole into the back of the slide chamber though. (The mod to this hole is for another day!) This mod alone gets rid of stutters at 2500 revs, and cleans pick up no end. If you are not sure quite what I mean with this flair, try to get a look at a Morris Minor or early Mini carb / air box plate (cast alloy) this had the flairs on the bolt on plate. This was just another one of those little points that Reliant ignored way back!

Another point in this department, sorted out some years ago was the over rich mixture, also at tick over, shown by 'eight stroking' at tick over, i.e. juddery tick over, also you got NO points, do not pass go from the M.O.T. man. In this case searching through other needles for the SU carb was endless and frustrating SO... we added a smear of solder to the needle at tick over. Some experimenting later got the right combination, but NOT a while you make a cup of 'T' job.

Somebody wanted a Kitten gearbox – what is wrong with a Robin box? Same thing, more plentiful. *Yes, almost true, but do not be forgetting the different number of teeth on the speedo drive gear! Ed.*

For the fine details of these and many more jobs on the '50 tweaks notes' please get in touch 01953 884681.

One other point that gets overlooked with regard to cold 'pickup' is oil in the dashpot, this should be 20/50 in the winter, perhaps something lighter in the summer for a little better response, but that comes back to that air hole in the back of the slide I mentioned... another day..

Thanks for that Alan, though as you will see, not quite half a magazine! It really does take a lot of hours to put even one edition together.

Oh, excuse me showing my ignorance Alan, but the dashpot oil (I usually use 3 in 1, or automatic transmission fluid) but surely you want the thinner stuff in the winter, not the summer? Or is that not the case? Whatever, thanks for your hints and tips, sorry they were delayed, but I really did not want to serialise Gari Jones's Liege story, nor indeed yours, or Simon Chisholm's – compromise strikes Ouch! – Ouch

P.S., I have still not heard from Craig Schofield since I last wrote to you.

Though Norman Schofield from Cheshire joined us in May, a relative of Craig's perhaps?

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## Getting even more technical!

The story continues – Reliant 850 Cylinder Head Studs

The stored strain energy is proportional to load and extension. For the same length and load, the extension is inversely proportional to cross-sectional area and hence to (diameter) squared. If the nominal diameter of the stud is  $D$ , and it is then turned down between the threads to thread core diameter  $d$ , the ratio of strain energies, 'necked' to unmodified is  $(D/d)$  squared.

I have with me a stud taken from a Reliant 850. The diameter of the plain portion is 0.373". The thread is 3/8" U.N.F. Supposing it to be class 2A, i.e. good commercial quality, the minimum core or minor diameter might be 0.316"

If the stud is turned down to core diameter between the threads, the ratio of strain energies as previously described will be  $(0.372/0.316)$  squared = 1.4 approximately, a worthwhile 40% increase. In view of uncertainties at the ends, there is not much point in quoting more than two significant figures.

Although the cross sectional areas at the reduced diameter and the thread root may be the same, the small radius at the root, in this example 0.006" – constitutes a stress raiser, which makes failures near the junction of 'plain' and screw the most likely.

Over-enthusiastic use of a spanner may pull the stud out of the crankcase. In such circumstances there is no need to remove the cylinder head. Carefully remove any debris from the hole, using a grease tipped 23/64" twist drill. Tap 7/16" U.N.F. through the head and to depth in the crankcase, clean out, and fit the 7/76" – 3/8" stud that you will need to have made. This gives, near enough, a full thread in the crankcase. I have found it to be successful,

A discussion of coefficients of expansion would not be complete without that of the cylinder head material, in this case an aluminium alloy having an expansion rate about twice that of most steels. It follows that as the engine gets hot, the gasket is squeezed harder. Several tightenings will be needed before something like permanent thickness of gasket is reached. In this respect a cast iron head is less trouble.

A. Shaw - Glossop

*Alan, my thanks, it is indeed reassuring to know that there are people out there who clearly understand these matters. The mod you talk of to salvage a stripped crankcase, without even removing the head, is, I feel, beyond the capabilities of most owners. Though I am delighted to be able to tell you confidently that I know of at least 9 of our readers who could do it no bother at all, which, in percentage terms, is I am sure, a very high figure when taken in comparison to a national average. What a clever bunch of people you are. (He said admiringly, because I am not one of them, too clumsy by half these days!) Ed.*

## SALES & WANTS

For Sale: - 1986 Reliant Fox Custom Pick-up, white / yellow, just 36,644 Miles.. Runs well but not taxed or M.O.T.'d. Tow bar, new exhaust to fit.  
£150 buyer collects. John Coates

For Sale :- 1977 Kitten Estate. No tax or M.O.T. £100.

For Sale :- Reliant Kitten DL Estate. KSG 707T. 75,000 miles, dry stored for last 10 years. Needs mechanical rebuild, intact. Offers

For Sale :- Tandy camper caravanette, contact Brian in the first instance, George Lawrie's vehicle. 0141 8866117

For Sale :- T registered Kitten Van, with side windows and rear seat fitted. Some work needed to put it back on the road, would make an excellent project for the winter ! Contact Brian on 0141 8866117..

For Sale :- Something completely different ! A 1955 MK III Sunbeam, I believe they had dropped the name Talbot by that time. This car is basically sound, has a floor gear change, and all the parts needed for a full restoration. It is not cheap, but well worth considering if you are in the market for such a vehicle. Contact Dick Watson

For Sale :- For a Reliant Regal (mentioned here because I think the dampers are the same as the Rebel) a set of new rear springs and dampers £50. Contact Derek Ferris

For Sale :- Martin Blunn's Kitten saloon see page 11.

For Sale :- 700cc Reliant Rebel engine, believed to be recently refurbished. Talk to Alan Melmoth

For Sale :- Late entry this, Alan Melmoth again, has a Salamander for sale.

For Sale :- Three, yes three Reliant Kittens, a saloon and two estates. Due to bereavement, they are being sold by Mrs. Elizabeth Richards

For Sale :- A pair of front doors (not actually a pair) £25 each or £40 the two. Front seat (ex Ford) grey fabric, non-recliner. Easy to fit to a Kitten. £25. Contact Al Osborn

Wanted :- For 1976 Kitten, one stub-axle 4 brake drums, 4 brake back plates. New or store soiled preferred ! Contact Pat Collins

Wanted :- Kitten estate Tow Bar. contact Peter Swan

Wanted :- Pair of rear VAN springs in good order, also a pair of late rear brake drums. Contact Al Osborn

Wanted :- A left hand headlamp (not left hand drive, just left hand side of the car – are they handed?) and a front grill for a Kitten,

Swap :- a 1986 VW Jetta, with 10 months M.O.T. for a good Kitten estate, which must have a long M.O.T. Adam Grieve.

## NOTES

I had intended a few words of sanity in here, after the Jowett do at the end of May, but then John Pearce came to your rescue by providing the front covers the second week in May. So I just had to press ahead and get this out to you before the big Jowett bash at Pitlochry. Then, a day after the covers arrived, so did John, with the lovely Sue, on a fleeting trip to Scotland! Great to see you both, now I can finally put faces to the names. Sorry that we didn't have longer to spend together, another time.

Oh, forget that, (the get the mag to you in May plan) there is far too much going on at the moment!

By the way, two of our subscribers did win prizes in the Jowett raffle, thank you all for your support with that, I won't do it again, not for many years at any rate.

I really should make special mention of an early Rebel, a saloon of course, that will be scrapped if we can't find it a good home. It is a 600, still with the original engine I believe, no seatbelts! Yet 1966 registered! It is, of course, in Scotland, but if you are interested, let me know. Jim Spence has agreed that we will take it away rather than see it lost, but it is incomplete, and we do not have the space.

The car in question lay in the yard of a Glasgow Reliant dealer, Peter Currie's, for much of the 1970's. When Peter was giving up the business, I bought it, along with an estate car, and sold the saloon to George Mitchell of Sheriffmuir. George had it for about a decade, but did nothing with it, though we did have the engine running when he still stayed at Cleish. George sold the car in 1998, and its current owner has decided against rebuilding it. From memory it is chassis number 52 or 53, and as such must be one of the last of the ones with the early chassis and steering. (Like the one featured on the cover of edition 23, but not in quite the same condition!) Unfortunately the steering is incomplete, Currie's having used some of the parts to repair an accident damaged one over 20 years ago now! Also most of the glass is broken or missing.

If you are interested, let me know, otherwise it will be broken, which would be sad, but will be unavoidable if we cannot find it an appropriate custodian. Delivery can be arranged if required.

Oh, by the way, George Burdett, one of our men on Orkney, was telling me that he has found a source of sensibly priced stainless nuts and bolts, it is that crowd who advertise on T.V. these days, Screw-Fix-Direct. They can be contacted on 0500 414141. If you mention George when you are talking to them, they will know what's what.

No of course they don't do UNF ones, but M8 does as a replacement for 5/16" and M10 does for 3/8". Now if I did want to run a business I'd invite you to order then in small numbers, and buy them for you in hundreds, but, as I have said before, that is not my idea of fun! So you are on your own, unless anyone wants to volunteer for that task?

Right, it's summer, so I am told, so get out there and do whatever it is that you do at that time of year, and have fun doing it – talk to you again in a couple of months. By the way, the S.W.T.V.C. did manage to book the 'Sir Walter Scott' for the Saturday night the 24<sup>th</sup> of June, so Moira will be getting her mid-summer's cruise on a steam ship after all! 3 days after our silver wedding!!

*Brian*