# Reliant Kitten Register

## **MEWSLETTER Forty-Six**

May/June 2002



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. 46**

I am eternally	grateful to	the following	individuals:-

Kitten alternative parts

Rebel alternative parts

Fox alternative parts

**Our Mutual Aid Spares scheme** 

**Mewsletter pictures** 

Our electric kitten man is Chris Lowe

Making its third appearance no less, Vantique No. 10, property of Michael Bentley is featured, only this time the picture is really to let you see what famous people appreciate John Box's handiwork (He was really impressed with the 'clunk', when shutting the door). It seemed, to my sense of humour, wholly appropriate to have a vet visit one of our animals, and even though the Vantique is only Fox based, the connection seemed enough to send for a vet when the shock of realising that the Wensleydale Railway Company had reached their first £million of share sales. Thanks to Arthur Hartley for the photograph, oh, and perhaps I should run a competition to see how many of you recognise the individual in the picture!

The Register has a, now fairly old, web page at:- <a href="http://www.uk-classic-cars.com/kitten.htm">http://www.uk-classic-cars.com/kitten.htm</a> which I hope to update this year. Meantime do have a look at <a href="http://www.reliantkitten.co.uk">http://www.reliantkitten.co.uk</a>

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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, is given in good faith. Such information 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.

Welcome and while I remember - don't forget about :-

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Hello there, once again welcome to another edition of your favourite bedtime reading.

I have, see, I do get there eventually, recently included the following long sentence in the letter of welcome that new subscribers to the Register receive – it reads as follows: "We do, eventually, issue membership cards, but I am afraid that the current arrangement only has 1 print run a year, and that is done in November, for the following year, so I am afraid that you will need both to stay with us into next year, and be patient – sorry!"

Now I am pretty sure that most of you knew that, I am sure it has been mentioned within these pages since Brian and Ian Millar kindly volunteered to do them for us a couple of years ago, thanks again guys. What I do find some difficulty with is ensuring that everyone knows the situation. It is all too easy to assume that people know things that they could not possibly know, unless someone tells them. Which brings me to the even more complicated matter of B1 licences and the vehicles that you can legally drive with them. I am quite sure, even with my memory, that it was Bob Neal – yes Bob, I'll name names! who first sent me the copy of the 'rules' and said that you could indeed drive a Rebel or a Kitten on a B1 licence, because they weighed less than 550kg. And I happily passed that information on to a number of folk. Since then a number of things have happened. I believe that the B1 entitlement has changed, early in 2001 I think, so restricting the vehicles it covers holders to drive. Those changes were, as far as I am aware, not retrospective, so if you passed your B1 test before the date of the changes, they do not affect your B1 licence.

However, enter John Calthorpe – yes, still naming names. John is a much respected and long time Reliant dealer in Bradford, who had heard that I was telling people that I believed that it was O.K. to drive a Kitten or Rebel on a B1 licence. John took the trouble to contact me to say that that information was contrary to his understanding.

Since then I have been more cautious, suggesting that such individuals get something in writing from the D.V.L.A. A number of people in this situation have told me that they have rung the D.V.L.A., and been told that it is O.K., but I have been at pains to point out that it really is of secondary importance what the law is, what is of primary importance, if we want to avoid frustration and difficulty, is that those who enforce the law are aware of the situation. In other words your local bobby, and I would suspect that he has no idea that driving a Rebel or Kitten on a B1 licence is allowed – if indeed it really is. The best way to convince him, is to carry an official letter from the licencing authority, which makes the position clear. I had a call yesterday,

27/04/02, from one of our more recent subscribers in the Kent area, sorry, but this memory has gone into idle again, you will know who you are. The point is that he told me that a local policeman had made enquiries, and came back with the information that it was O.K. to drive a kitten saloon, but not an estate! So I read off to him from the Reliant Workshop manual the kerb weights of the saloon, 505.81kg, and the estate, 538.9kg, and re-iterated my belief, that, if the key to this is weight, and specifically 550kg, (the B1 licence limit, increased from 500kg to 550kg since early in 2000 I think it was) then the answer is obvious. John Calthorpe's contention was based on the fact that, he claims, you cannot drive a quadrocycle on a B1 licence – contrary to the belief of certain other dealers I have to say, and they only weigh, well have a maximum weight limit of 400kg. Complicated and confusing – certainly. As soon as someone gets me a copy of something clear and specific – and official, in writing, covering Kittens and or Rebels, I will let you know. Ed.

Note that the Fox is too heavy. That said I do know that a number of folk have gone to the trouble and expense of having a Kitten weighed, and with years of road dirt, possibly a bit of welding, and too much fuel in the tank, they in reality weigh nearer 600kg. But it is manufacturers kerb weight we are interested in, not irrelevancies like actual facts! Oh, hang on a moment, the current edition of Practical Classics has something on this – why oh why can't these people find a Regal or a Robin when they want one? Not my problem I know, but somebody should be doing better out there.

Back to apologetic mode, I have had this piece of paper, small, about 2" by 3", or 50mm by 75mm for those younger souls out there. Written on it are the following 14 words. "Can you send me any info on alloys for a kitten if you can." Sadly the note became separated from the other contents of the envelope it arrived in a few weeks ago, (Brian's desk strikes again!) and I have no idea at all who sent it, and so cannot respond directly. This subject has been covered to some degree on a number of occasions in the past within these pages, and so I would suggest that the simplest way to proceed is for the person concerned to avail himself of a copy of Dick Goodall's index to the Mewsletters, and move on from there.

Right, enough for now, talk to you again soon. Brian.

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As you will have realised from comments I have made in the past, Dick Goodall is a regular correspondent. What you are probably not aware of is the fact that most of Dick's letters come with a 'thought for the day' page attached, theses attachments cover a wide range of thought provoking and witty topics, many of which have Moira and I near to tears with laughter. The other day it was just a 4 liner:-

When in Danger When in Doubt Run in Circles SCREAM & SHOUT

I know just what he means! Still no sign however, of the men in white coats!!

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It did occur to me that, having treated you to Alan Shaw's lovely drawings last time, that the notes on the drawings that the scale was 1/1 i.e. full size, is of course made a nonsense, when they are scanned in and reduced to fit the page!

## REBEL ROUND UP - REBEL YELL!

Part IV - In out, in out, shake it all about

Going back in time to when we got the Red Devil, one of the jobs done was to replace all the slimy black stuff with nice new clean fresh oil. Engine, diff, steering box and gearbox – ah yes, the b!\*\*&% gearbox! Although our Rebel is one of the last made (no free tax 'cos of it), it has an early 'box. 'Why?' I hear you cry. Well, it's because a previous owner had two Rebels, one with an early box and one with a later box, and when one box died, he just swapped them over. Easier said than done as they are of slightly different length and shape, but it does mean I can have either gearbox in the car.

Anyway, when I bought the car I thought I knew the gearbox was OK. However, after changing the oil, it decided that it would not go from 4th to 3rd unless it made sure everyone within a hundred yards could hear the sound of teeth grating against one another. The early box is known as the crash box, but this was taking the biscuit. After consulting many people about the merits of stripping a box, most of who laughed and wished me luck, out it came.

Using Haynes's Regal manual as a guide (the early box is based on that used in the Regal), the gearbox was stripped, cleaned and reassembled. This box had been to bits before, the laygear thrust washers had been fitted incorrectly and the 3rd/4th synchro hub assembly, according to Haynes, had been put in wrong. I also found that a new clutch plate and thrust bearing was required. Being a bit naïve, trying to get a clutch for a Rebel is like getting a blood out of a stone, and when you can get one it's silly money. Sense quickly prevailed when I changed the word Rebel for Kitten and lo & behold it was no problem at a fraction of the cost. Back in it all went and – "crunch" 4th to 3rd and "kerangg" 2nd to 3rd!

Back out and apart it all came. The synchro hub was put back the same way it originally came out. Together and back in it all went and – well at least it stopped grinding between 2nd and 3rd!

After speaking to various people, it was considered the hub itself to be at fault. In simplest terms it can be described as two teethed rings, one inside of the other, kept together by sprung loaded ball bearings. As you select a gear, the inner ring offers a machined surface up against the gear you are changing to. This synchronises the rotation of the hub to the gear, which then allows the outer ring of the hub to slip onto that gear without the gnashing of teeth. Common faults with hubs are the machined surface (or cone) being worn, damaged teeth, or worn bearings.

A replacement hub was eventually tracked down and so the cycle began yet again. Out and apart came the box. In went the new hub and all the other bits and back into the car the box went. Crunch went the 4th/3rd gear and out came my hair.

This wasn't the only problem with the gearbox. Oil was seeping from every orifice possible. Gaskets were all home made, using the gearbox sub-assemblies as patterns. Oil was even coming out through bolt threads. These had to be cleaned and smeared with Hermitite during re-

assembly to stop the leaking. You can easily obtain the primary shaft seal as it is the same as the current box, but the tail shaft seal is a different matter and has so far eluded me in finding a replacement. Update on that, you can get them from Oil Seal Express of Unit 15, Enterprise court, Pit Lane, Macclesfield, Leeds LS25 4BU Tel 01132 871231 Fax 01132 862008 the ref is 17111862RF6, Ed. Back in the dark ages however, black one-component silicone sealant (you can get similar stuff from Halfords) has been found to be more than satisfactory. To explain is quite long winded, if you want to know how it is done, give me a bell.

An alternative to all this 'in out, in out' business is to get another gearbox. And so I did. Brand new and with full synchromesh. However, it was missing an important item, namely the gearlever. When he cleared out his lock-ups, Brian Marshall came to the rescue. Seemingly using favours from a list longer than my forearm, he got it sent over. But then arose another problem. It became obvious this gearbox was not originally destined for a Rebel as the lever would not fit. One from a Robin can, but the correct one, which has a longer tongue, doesn't. Looking at the workshop manual, the later gearboxes have an approx ½ inch spacer plate on the top where the lever goes in. My new all shiny lump of useless metal doesn't. So if anyone out there has either one of these spacers spare, or has a later knackered box they are willing to break, let me know.

Back to the original gearbox, armed with clumps of hair and out of frustration, the good guys down at Reliant found me a third gear for the Regal box. Bearing in mind this story has now been running for over a year, we had become rather proficient in changing from 4th to 3rd with the minimal amount of crunching and it was decided to let sleeping bears lie until I was forced to remove the gearbox again.

The opportunity arose mid-2001 when the engine was removed for an overhaul. So out the gearbox again came. It was during this strip down I investigated why the synchro-hub wouldn't work when fitted the way Mr Haynes describes, ie. "...when in position, third gear rotates freely." To simply put it, Mr Haynes, you're wrong. When the machined surfaces (cones) on the gear and hub meet, they effectively cause the two items to become one. The gear will rotate, but with great difficulty. Only when you pull the hub away from the gear will it spin freely. So when you put the hub in the wrong way, the machined faces can never meet and you will never achieve third gear without that horrifying graunching sound.

Well, it all went back together, along with a refurbished engine, brake system and radiator (methinks there's scope for another chapter here!) and off down the road I went... 1st to 2nd, ok. 2nd to 3rd, ok. Heart thumping, pulse racing, cringing with fear, I shifted into 3rd. Ok! So far so good. Up into 4th, no probs.

Now the moment of dread. 4th to 3rd. The 100 foot cliff was nearby, the 5 litres of petrol and box of matches were ready. As it was, I never needed them. What a sweet sound I heard, at least, the lack of one. After almost two years it finally worked as it should! Long live the gearbox!

Mark Hayton

Next: Solitary Confinement

Thanks for that Mark. By the time you read this you (Mark that is) should have had from me a small package containing an Oilite bush which you ought to fit in place of the one in the centre of your Rebel's 850cc engine's flywheel, before the gearbox fails – I'll be doing mine before the 850cc engine goes into the car!) for the record the bush is available from Bearing Services, it is part number OB071108, so now you know. Right Dick, get that in the new updated index please, and Mark add it to the relevant section of the alternative parts list, under 850 mods perhaps?

This is the bush that you need to change to support the gearbox input shaft. The early Rebel gearboxes had a lighter / smaller shaft, it was 7/16" diameter, whereas the later gearboxes had a sturdier shaft, and so a bigger internal diameter of bush in the flywheel to support it, a nice round figure this time, ½". (Oilite bush 0B081108, but you won't need to know that, as they never wear out!) So if you fit an 850cc engine to an early Rebel, you will not be supporting the front of the gearbox input shaft, unless you fit the appropriate bush as above. — OB071108. Now, in theory, if not practice, I think that the only time this actually matters, is when the clutch is disengaged, and so the weight of the friction plate is carried by that shaft. Mind you, just thinking about it, if it is not central when the clutch is re-engaged, you will be putting a strain on the bearing inside the front of the gearbox all the time, never mind the potential balancing problems! Given that the gearbox is the weak link in the Rebel in the first place, do we really want to give it any excuses for giving us bother?

Ed.

## FOXES' DEN

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Dear Brian, 28th March 2002

Following the tip in the Mewsletter, I sent my seatbelts for the Fox to Stephen Armstrong for restoration. Although they had been quite badly damaged in the fire, Stephen did a good job of restoration, and supplied new buckles. (The bits with the wire ropes that attach to the prop shaft tunnel that the seat belts clip into) He also supplied new bolts, all for £32.50 the pair, and it cost me £6.50 each way for postage. He was unable to supply green webbing to match my seats, as he has to buy 1400 meters as a minimum order! He sent me samples of the webbing he keeps in stock, and in the end we chose red as we felt that a good contrast was better than a bad match. I can therefore recommend his services. His telephone number is :- 01228 402286.

I have just bought a brand new windscreen and had it fitted to the Fox, which is now nearing completion, but somehow I have managed to scratch it in a position which could affect the MOT. If anyone knows a way to remove scratches from glass, I would like to hear from them please. Note my sanity is at stake here.

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Jim Lugsden Kent

## **Liege Page**

Peter Davis tells me that he is just back from a reccie for the Targa 2002, 4200 miles of it! The Monte Carlo Kitten is even entered in the event!

4 Lieges are entered in the event at this time. Mike Botteril and Liz, Keith Nicolls and Sandra Bull, Howard Blackwell with John Reeve, and Geoff & Ben Lindon are up against a field of 44 other entrants so far. The event takes place on September the 21st to 25th, and I am told that a lap of the Nurburg ring is included this year as a special treat.

2 more Lieges have now passed their S.V.A. test, which by my reckoning makes it 11 in total to date. Well done chaps, keep at it the rest of you.

## **Tempest update**

Steve is still keeping busy having recently moved to new premises. Still on the lookout for homeless Foxes, and tells me that 3 of his Tempests are nearing completion. Tel: 0151 6523010

The new address is :- Auto-gear, Units 2/3 Quarry Bank Workshops, Oxton Road, Birkenhead L41

Tempest No. 1 is currently being resprayed in black, and is being upholstered and kitted out with Triumph adjustable seats.

## **Competition Corner**

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John Dixon, our man in France, was pointing out to me, March 19, 2002, having read of the exploits of the Lieges in edition 44, that he won a silver medal (just the 1 fail) in his Regal in April 1995 at the 74th Lands End Trial, Event No. 22416 Ap/15. The one section that the Regal failed on was 'Beggars Roost' at 3:51am!. Clutch slip off the line, they had dropped the start way back on a nasty slope. Blue smoke everywhere! The fact that the cost of the vehicle, at £200, was probably less than a 30th of the cost of a Liege, does bring a smile to his face – John thinks that perhaps we will see a lot of wanted ads appearing for Regals (Wouldn't do much good in this publication John, Ed), "Part exchange for Liege, hardly ever used" Ha Ha! But he agrees that they do look pretty.

## Brian's Diary - April 2002

Well, that's done it! After mentioning in the last edition that I would consider being parted from one of my Reliants if offered sufficient pound notes, the wee red car is away to a new home. She left us on Sunday 29th April, and I didn't even cry – brave lad that I am. On the Monday morning, when looking out the window rather sadly, Moira said, just look at it this way, pretend she has just gone to the vets for a few days, and will soon be back. Yes well that's fine for the next couple of days, but what after that, when I realise she isn't coming back?

Still, I console myself with the knowledge that she has gone to a good home, Douglas will look after her, and polish her like I have not been able to this past while, and fit the bits I had, but didn't feel up to fitting. So all in all it has to be good for the car, which is the main thing.

As is so often the case in my life, the sale / collection of the car was tied up with a number of other things including the return of a trailer, (the tow vehicle brought Douglas the 180 miles down the road) an A.G.M., and a meal with a number of old friends, the passing on, on loan, of an early Rebel gearbox via a third party, and so nothing had my undivided attention really, but we did tie a few things up, and Brian Millar even e-mailed me pictures of the wee red car disappearing away north on the motorway. The end of an era? Well, I still have the Kitten van project, and at least I can now afford to keep the Rebel on the road for the foreseeable future, maybe even get it the new front dampers it could be doing with.

Mind you, the price Douglas paid for the Kitten, while close to what we paid for it 6½ years ago, barely covered ½ the cost of the new parts we have fitted to it during that time, nor is it enough to insure Arleen, she will be 17 by the time you read this, to drive the Citroen for a year – all things are relative! (No, she can't drive the Rebel, it is on a classic car policy, and they exclude drivers under the age of 25).

Will I survive? Get over it even? Time will tell. They do say that a problem shared is a problem halved, so I guess by telling you, I should be better able to cope.

Enough Marshall – on with the magazine.....

### **READERS LETTERS**

Dear Brian, 10/03/02

Just a quick note regarding Mewsletter 44, page 24 re electric fuel pumps, and since I have become 'someone from Peterborough'. (Could Al's memory for names be getting as good as the Editor's?) I was grateful for the time Alan Osborn gave me to discuss the modifications, and he is probably right about the electric pump only. However I had previous success with adding an electric pump to a Scimitar, which had a similar summertime problem of vaporisation with the carb sitting on top of the 'V' of the engine. So I tried the same solution on the Kitten, with the pump switched from the dash. This has improved starting, particularly from hot. At the moment the pump is switched off in normal running, and therefore your concern about pumping on after a crash should not arise, also using the electric pump in 'standby mode' means the mechanical pump would show a fault if the diagraphram failed.

I need to continue the development project, which is where the magazine articles are excellent in showing where people are finding worthwhile modifications. Now all I need is some spare time.

Your work with the magazine is appreciated. I enclose renewal subscription with extra for your spares fund.

Mike Philips - Werrington

North Shields June 2002

Here we are again, the "show & shine" season. Kitten Blagburn and I are just back from the Sunderland & District Classic Vehicle Society's Seaburn show. I have attended this event every year since the days of the red Rebel, and would recommend it as a friendly, well attended and eclectic gathering.

I had found a small leak in LTF's radiator earlier in the week so I took a Mini radiator along to a local firm whose workshop is one of those wonderful "olde worlde" places, as yet unspoiled by the "throw it out & buy new" ethic which is gradually eating away at the motor trade. Charlton Radiators, 14 Back Goldspink Lane, Sandyford, Newcastle 2. They're the people to see. They built a radiator precisely to my requested specification which is now fitted and, just like the old one, keeping the engine far too cool even with a 92 degree thermostat, a blanking plate behind the grill and no fan. OK, I know, many Reliant engines run too hot, but if that happens the cause will usually be a water jacket full of sludge and sand. If yours is one of the cool ones, Halfords advanced protection coolant will keep it that way. Brilliant stuff- it protects against freezing down to -69 Celsius, yet (@ 70% concentration) will not boil until it reaches 150 Celsius. It is expensive, but can be left in the cooling system for 5 years so is probably quite cost effective.

On the subject of car shows, if you think that, maybe, this sort of thing isn't for you, take your Kitten, Rebel, Fox or whatever and just do it! Only the tiniest minority of people on the show scene are perpetrators of brand snobbery. Genuine enthusiasts love the wee Reliants and I invariably meet new people at each event, today I was parked between a very bonny Imp and a fine thirties Rover. Further along the line were the Scimitar folk, the American cars (thank you, I've heard all the Reliant jokes, try harder next time out chaps!) and even one or two '60s cars which hadn't been featured in "Heartbeat". Cheers folks, mind how you go, John Blagbum.

## Where are they now?

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Right, I have failed to make any progress with this. It does occur to me however, that this could be an opportunity for me to delegate! Any volunteers out there to help trace any of the missing Kittens which we have some details of? Just let me know, and I will forward what details we do have.

#### Still Looking for a Partner?

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Michael Kerr was looking for someone in the Somerset area with a place to work in, to share his project, and help in the building of his special. Any progress to report Michael?

Michael Kerr -- Somerset

## **Tales From Tore**

Dear Brian, 20th February 2002

It's another dull, cold, rainy day - how unusual? A few silly crocuses are almost coming into flower, mistaken plants! The daffs are up to 6" high and so could be on time for March. Do you remember the saying 'March brings breezes loud and shrill'? Well February does too. Tonight the bus my son gets home came round by Beauly from Inverness as the Kessock Bridge was closed to high sided vehicles. He seemed to enjoy the change of route, and didn't mind the extra time taken.

Could you put a WANTED ad in the next Mewsletter please? WANTED. Air cleaner for 850 engine, the type which has a spout poking down to take warm air from the manifold.

INDEXeseses for the Mewsletter. No demand yet. Just as well as I'm not yet organised and the PC has gone erratic again. I'll get this done while it works!

Kitten steering rack mounting rubbers As mentioned by phone, Ford parts fit, see Brian Millar's Alternative Parts List. The details for Orlando were-: 3rd September 2001 Macrae & Dick (Ford parts dept), Inverness • F1420582 Insulator-Rubber & F1420585 Insulator-Rubber

Kitten estate rear seat retaining straps, which hold the seat upright. The Ghost had both broken when I got it, and I tired of the seat flopping about. A first cure used knicker elastic, not elegant but effective. Then I found that fitting two '0' rings of about 1" diameter at each side works and looks far better.

Kitten Gear Lever Gaiter Gremlins This rubber effort often comes off the console when reverse is selected, then works its way up the gear lever, so letting in noise and fumes. I wrapped insulating tape round the top end of the gaiter to hold it in place, and it helps. Is there a better cure?

Advance / retard vacuum tube fittings For the Ghost, I could do with both the wee piece of plastic tube which goes onto the carb and the 90 degree rubber which fits the distributor end. Any idea of a source?

850 engine into Rebel 700 Nice idea for more power and your point about the special bush for the flywheel is noted. Does the 850 engine backplate fit straight onto the 700 gearbox? Yes it fits straight on, Ed.

Update on that, I have the first request for a copy of the Mewsletter Index of Contents, from our man in Illogan, Cornwall and it will go on its way tomorrow.

After your request to get more Kitten steering rack rubbers, I will order them tomorrow, I need to go for food anyway, can't seem to manage without the stuff somehow.

I have typed out Alan Shaw's notes of very helpful information received over the phone and here is my script. Now all we need is to have my mistakes corrected!

#### **Kitten Steering Rack Hints**

#### 1) Play in the Rack

If the pinion bearings are OK, the usual MOT fail point is play in the rack. This can often be easily cured without even removing the rack from the car, by means of adjustment of the thrust pad at the side of the rack. Clean round the thrust pad cover and remove it. Remove all the shims and put them to one side. Replace the cover and see if the play is removed. If too tight, replace shims one at a time until the play is removed and the rack moves smoothly. If wear is bad and removal of all the shims has not eliminated all play try this. Take the lid from a margarine tub. Cut out a circle just the size to fit inside the hole in which the pressure pad fits. Fasten this plastic shim to the underside of the cover plate with double sided sticky tape for ease of cover refitting. Replace the cover, when the play should have gone. (I imagine that in severe cases 2 or more plastic shims might work? An interesting point is that the Manual shows a spring under the cover, and pressing onto the rack damper' item 12. So I am a little puzzled why such precise shimming is needed. Must try it on an old rack to find out. #157).

#### 2) Apparent play in the driver's side inner ball joint

The rack is well located by the bush in the passenger's side of the rack housing. But on the driver's side the bush is a slack fit to allow for the adjustment of the pressure pad pushing the rack sideways a trifle. So if the pressure pad is a bit slack, it can let the driver's end of the rack move quite a lot, which gives the impression that the driver's side inner ball joint is slack. Try adjustment as above before removing and stripping the rack.

#### 3) Lubrication of top pinion shaft bearing

This bearing suffers from rain ingress through an ineffective 'seal'. Every month paint some hypoid oil onto the top of the pinion shaft with a brush. Also paint some oil onto the bottom joint of the lower steering column.

#### 4) Rack lubrication as per Dick Watson.

The rack should contain 1/3 pint of hypoid oil when rebuilt. This can get diluted by ingress of water. One way to keep the rack well lubricated could be to remove the pinion shaft lower cover, drill & tap the cover, and fit a lubrication nipple. Then reassemble. Every month or so apply a gun filled with hypoid oil to this new nipple and give one or two strokes. This should keep the oil level topped up and help prolong the life of the bearings. A rack modified this way by Dick Watson lasted for 145,000 miles.

#### **Kitten Heater Control Knobs**

These should be held in place by spring steel clips inside the plastic knobs, which are not available from Reliant. Replacements can at present only be had from a car being broken up.

<u>Kitten Fan Belts</u> - sizes and fouling of bottom radiator hose on the alternator pulley and bodywork.

There are several points to be considered.

- 1) If a replacement alternator has been fitted, they come without a pulley. In removing the old pulley for re-use they can be broken and a replacement of a different size may have been fitted. NOTE. When removing an alternator pulley DO NOT grip it in the vice while the nut on the end of the shaft is undone. This usually breaks the pulley! Just behind the pulley there are 2 flats on the alternator shaft. By holding these flats with a spanner, the shaft can be held while the nut outside the pulley is safely undone.
- 2) On a genuine Reliant radiator, the bottom spout for the hose is believed to come out at a different angle on early compared to late model Kittens.
- 3) Fitting a Mini radiator is a common cost saving measure. But the bottom hose spout on a Mini radiator is not necessarily at quite the same angle and position as a Reliant item.
- 4) The bottom hose now supplied by Reliant has a different shaped bottom leg to the old type. However this does at least have the benefit whereas the old hose cost £15, the new one is about half that price. Where the bottom hose fouls, and possible cures.

There are 3 possible problems, in the worst situations all 3 cases may apply.

- 1) The fan blades or the rim of the alternator pulley rub on, and may soon cut through the bottom hose. In this case fitting a 700 length fan belt instead of the 713 length belt often effects a cure.
- 2) The hose rubs on the suspension clamp bolt.
- 3) The hose rubs on the body, possibly due to the bodies being hand made. For both 2) & 3), a cure may be to secure the hose in a suitable position by a cable tie tightly round it which is secured to the body just below the battery

#### Kitten Wiper Spindle rubber under the hex nut outside the car

(These have split lengthways on my cars - #157)

These only seem to be available with a new wheel box. (I can now get these rubbers made locally - #157) Possible replacements are-

- 1) Perhaps they can be made from heater hose. The 1/2" size may be too small but the 3/4" size may suit.
- 2) Try a walking stick rubber ferrule, available cheaply from hardware stores and chemists.
- 3) Brian Millar believes the Mini item to be a good starting point, though it may need to be modified.
- 4) This place is a potential rainwater leak point. Remove nut and rubber, apply 2 rings of Bostik No 1 (original) round the spindle at the body and then replace rubber & nut.

(note 23rd April 2002. Alan Shaw says the shallow hexagon nuts which hold the wheel boxes on are chrome plated brass, with a 5/8" diameter 24 tpi thread, which is one he cannot find anywhere in his reference books, brass threads being normally 26 t.p.i.)

#### Kitten Driver's & Passenger's Door Removal & Fitting.

Apart from rusty bolts, removal is easy. However refitting correctly is definitely tricky. The Manual shows a steel strip on the inside of the body behind the hinges. A point seldom appreciated is that under each door hinge, on the outside of the body, is a steel shim. Make up a continuous stainless steel strip from the top of the top hinge to the bottom of the bottom hinge and which fits under the hinges on the outside of the fibreglass body. This not only provides more rigidity to the assembled parts but helps with reassembly.

Kitten Door Hinges

These are surprisingly strong, but if the door is allowed to swing too far and fast, the hinges can pull out of the door. The later Robins have a check strap fitted to reduce this problem and doing this on a Kitten is worthwhile.

#### Aid to Adjusting the Alternator Frontmost Pivot Bolt

Working from under the car, use the ring end of a combination spanner to fit the bolt head, then wedge the other end of the spanner against the front chassis cross member. The nut can then be worked with another spanner while the bolt head is trapped by the first spanner. (I did try this, but with my luck the combination spanner kept, falling off, ah bother!)

Best Wishes, Dick Goodall

Thanks for that Dick, see I have finally got the scanner hooked up, and am getting benefit from it. The above is a summary of some of the letters received from Dick during the early part of 2002. Those observant souls out there who regularly read the Mewsletter may well have spotted that the article in the last edition from Dick, in fact falls in the middle of this lot, but I am getting there. What I will need to watch now is that my editing is up to the job in future! Ed.

## From the In Tray

Events we are invited to this time include :-

Adrian's Great Eastern Rally, with the D.L.O.C. (Daimler and Lanchester Owners Club), will take place on Sunday the 21st of July 2002, see next page for more details. This is the one where Bruce Emery's Rebel (remember the moss encrusted hut?) won an interesting award last year! Ring Adrian for further details on 01277 227708

The Wykeham Country & Angling Fair. August 17 / 18th 2002. Even Phoenix the calf will be there I am told! Contact Heather Archer 01723 866600 for more details of this event which offers far too many attractions for me to list in here. Suffice to say that vehicles up to 1977 are welcome.

Pat Collins faxed me today, just as I was putting edition 45 to bed, to tell us that his local branch of Halfords is selling HL 041's, their version of the alternator which fits the Kitten, for £24.99, which in his recent experience is a bargain. Now I will admit that it is a while since I bought a Lucas LRA 100, so they might well cost as much now, they used to be about £15

Not, thankfully, a problem we suffer from to a great degree, but a company called the L.B. Roe Corporation, who operate in England as A.M.S. in Blackpool Tel 01253 401872, recently sent me information on a de-rusting product called "Rustoff". It has a whole list of benefits, but no prices quoted – right, that's you told, another bit of paper to the re-cycling bin!

As you will read on page 23, Brian Radford is planning a rather exclusive run in 2003, and I was wondering if I can really support such an exclusive group – memories of the past haunt me in relation to the Rebel Register as most recently run by Terry Scott. What would it take Brian, to coax you into widening your planned country long event to include Rebels, Foxes, and indeed any of the specials? (Thinks, I wonder if we could even arrange for the Vantique to be involved, and what about a Tempest or a Liege?) Hmm, food for thought methinks – how about it Brian?

Oh, I nearly did it again, forgot my 4 times table I mean. I had planned a degree of flexibility in this edition, having, to hand, thanks Adrian, the advert for the Great Eastern Rally, which I could have chosen to either include or omit, and so increase or decrease by 1 A5 side the size of this edition. I did want to include some humour, though the beer story could have waited till another time, useful because it fills one A5 side nicely. The problem is that it is not A5 sides that matter, other than in multiples of 4. That is A4 sheets are what the magazine is made up from. And the addition or subtraction of each one of them, makes a difference of 4 A5 sides, and I seemed in danger of having a blank page, hence this waffle.

Let me not waste the space entirely. I have just secured a small number of new boxed Rebel steering column stalk switches. I believe that they were officially known as multi switches. You know the thing – horn push, indicator, headlamp flasher, dip switch. Well, I have some here now, and you can have one for just £22 delivered. First come first served.

Also, Brian Radford tells me that he is planning a Kitten only run from Lands End to John O'Groats next year, 2003, on dates yet to be arranged, contact him if you are interested in knowing more. His e-mail address can be got from the web site reliantkitten.co.uk.

What else, well, it has on occasion occurred to me that, in spite of all the waffle, I fail to communicate effectively at times. Hindered by the fact that some people, in an effort to make my life simple I have to say, choose to use a UK mailing address, so I am often slow to mention, indeed to realise, that we have readers pretty much all over the globe. Australia being one of the furthest who has been with us for a while, but I recently, June 2002, had to mail the back issues to Chile in South America, though he too has a friend in England whose address I can use for non-urgent mailings.

It is good to have you on board chaps, and rather – oh dear, that elusive adjective again – well, you know what I mean I am sure – interesting will do, to think that these words I write in this corner of the world where we used to build ships and railway locomotives for many countries around the world, are read in such far off places. Makes you think... Well, it makes me think at any rate! Right, enough – on with the mag.....



## **GETTING TECHNICAL**

Just to follow up briefly on Alan Shaw's excellent article in here last time on anti-roll bar mountings, it was pointed out to me that Reliant did eventually realise their design shortcomings, and that later Foxes had a modification similar to, but not as comprehensive as Alan's, fitted as standard, though their mod was really just a spacer, only lowering the mounting by a few mm, not moving it back as well.

Ed.

Technical Tweeks from Thetford - 04 April 02 Tweeks

A Osborn 35 Griston Rd. Watton, Thetford, IP25 6DN Tel:- 01953 884681 + Fax

Well this time we do have some real news to offer, I've fitted a new clutch, four new tyres, a new alternator AND a new exhaust system! In fact the exhaust is so new it is of the 1 ½" dia, another 'go faster' mod. The clutch was needed as the operating point of the old one was right down at the bottom, it made gear changes hard, and needed lots of left leg push. Turned out the release bearing was worn to its limit and the cover plate part it engaged with. Yes I did change the roll pins in the clutch shaft, and yes they can be changed with the box in the car (engine out). There is just enough room to bash the old pins out within the bell housing.

In the past we've always done a clutch joby by crawling underneath, prop shaft etc! BUT much easier to take engine out. One big bloke or two normal mortals with a bit of rope can get the engine out. Yes you need the radiator out, but how long does that take? Also changing the oil filter is so much easier with the engine sitting on the floor!

Now came the new exhaust. I didn't have a complete re-manufactured system but had a pal bend up some stainless tube, and I purchased a Fiesta back box, the latter had the right size input pipe although it needed a quick cut and weld. And it had a rear hanging bracket that only needed a heat and bend. Now the for and against. First the down side, the d... thing bangs on the chassis. I expect in time we'll cure it, but it is a pain. The low end speed range is noisy, i.e. top gear 30mph etc using the throttle does have increased low frequency 'boy racer' noise, which I was trying to reduce. The bottom end punch in the engine has marginally been reduced as well, but only a smidgin, as the bottom end stomp from this engine was excellent in the first place so the slight loss is acceptable.

Now the up sides; from 50 mph 3000rpm when the cam used to start to be noticeable, all goes quiet, and the engine really starts to 'get it on' you can even feel the efficiency come up as well, as you seem to be needing less throttle for 55 than 45 and maybe less exhaust/engine noise. It also seems to run a smidgin cooler and it uses a smidgin less petrol. Another small extra is the ability to run on half choke, usually unless the carb is very well set up, dash pot oil/choke settings then the half choke driving, pulling away, always needed some throttle/choke juggling. This has all become easier. Top end performance? not really explored the reaches above 5,500 yet but it does appear to go 'off song' a bit, Norfolks roads don't really encourage long bursts of 70-80 mph every day. But we do intend to look into fitting a fuel/air ratio meter as mentioned by our Leige dept man Paul Wheatly, then we can really do some tuning. By the way my theory said that an opened up exhaust system should give better extraction of gas hence the carburation should go weak and so need richening. Wrong again! This paticular plot went about three flats rich, and had to be weekend. ho hum.

What else technically - as it happens, when I do something, there is the answer or correction in the next Mewsletter. I've just had the antiroll bar end pivot points fail - only done 240,000 miles; (just not good enough;!) I've got some second hand ones on, and a pair of new ones sitting on the bench. And there in the Mewsletter, is the modification to reposition the antiroll bar, to stop wearing out the bottom wishbone, which I did see when I changed the damn things. But luckily working on this department is relatively straightforward. Has any one got any 20mm mild steel bar? That's it, keep on that Kittys tail.

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Getting slightly less technical, Derek Argyll, amongst others, occasionally feels that I don't have many jokes within these pages, and he is undoubtedly correct in that assessment – then again, it is not a jokes magazine, but just to show I don't wear blinkers all the time. The funny Side, from Derek Argyle:-

A man walks into a bar and notices two pieces of beef nailed to the ceiling. He asks the barman what they are doing there "It's a competition" the barman replies "If you can climb up there and get these bits of meat down, you'll get free drinks for the rest of the night. But, if you try, and fail, you'll have to buy a round for everyone in the pub. Do you fancy a go?" The man had a long hard look at the ceiling, and the busy crowd in the bar, before saying — "No, I'll just have a pint thanks, the steaks are too high".

I did feel that the next one should be told by Basil Brush :-

The police arrested two men, one for drinking battery acid, the other for eating fire crackers. They charged one and let the other off.

#### Boom boom!

On a slightly more technical note, little Jerry was removing some engine valves from a car on the garage lift when he spotted a famous heart surgeon waiting for the service manager. Jerry, who was somewhat loud of mouth, shouted across the garage "Hey Doc., is that you? Come over here a moment. The famous surgeon, a bit surprised, walked over to where Jerry was working on the car. Jerry, in a loud voice that all could hear said argumentatively "So Mr fancy doctor, look at this work, I also take out valves and replace them, and when I am finished this baby will purr like new kitten (no pun intended) So how come you get the big bucks when you and me basically do the same work?" The Dr., very embarrassed, shook his head, and quietly said in a soft voice "Try doing your work with the engine running".

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Still on a theme which has little to do with cars, even less with Reliants, other than the fact that it came from one of our number who just happens to edit the magazine of the Telford branch of the R.O.C., Thanks Kerry – almost as deep and meaningful as Desiderata! Not a lot of faith mind you!

#### I drink, so I am!

A philosophy professor stood before his class with some items in front of him. When the class began, wordlessly he picked up an empty jar, and proceeded to fill it with rocks, rocks about 2 " in diameter. (That would be 50mm to the youngsters among us) He then asked the students if the jar was full? They agreed that it was. So the professor then picked up a jar of pebbles and poured them into the jar containing the rocks. He shook the jar slightly. The pebbles, of course, rolled into the open areas between the rocks. He then asked the students again if the jar was full. The students laughed, and agreed that this time it really was full. The professor then picked up a box of sand and poured it into the jar. Of course, the sand filled up everything else.

"Now" said the professor, "I want you to recognise that this is your life. The rocks are the important things - your family, your partner, your health, and your children - things, that if everything else was lost, and only they remained, your life would still be full. The pebbles are the other things that matter, like your job, your house, and your car. The sand is everything else. The small stuff. If you put the sand into the jar first, there is no room for the pebbles or the rocks. The same goes for your life. If you spend all your time and energy on the small stuff, you will never have room for the things that are important to you. Pay attention to the things that are crucial to your happiness. Play with your children. Take time to get medical check-ups. Take your partner out dancing. There will always be time to go to work, clean the house, give a dinner party, and fix the washing machine. Take care of the rocks first — the things that really matter. Set your priorities. The rest is just sand."

But then a student took the jar, which the other students and the professor agreed was full, and proceeded to open a can of beer and pour it into the jar. Of course, the beer filled the remaining spaces within the jar, making the jar truly full.

And the moral of this tale is? No matter how full your life is, there is always room for a BEER!

## **Sales and Wants**

For Sale :- Kitten saloon and estate, also a Rebel, and a huge amount of spares, contact Robin Ellis

For Sale :- Most Kitten spares available, what do you require? contact Martin Seymour

For Sale :- Kitten estate, long MOT, 2 owners from new. . I have every MOT it has ever had, original order, receipt etc. Was originally a van, but professionally converted to estate. Many new service items fitted. Reluctant sale, £595 o.n.o.

For Sale :- Kitten saloon full MOT, blue in good all round condition, runs very sweetly, a nice car. £757 o.n.o.

For Sale: garaged red Kitten saloon, taxed till May, and tested till September. Alloy wheels with new tyres, new tow bar. Front suspension has been renewed, and there are a pair of new back dampers, boxed, with the car, contact Mr. A. Stephen

For Sale :- Fox Tandy campervan, Contact Bill Smith

For Sale :- Kitten bodyshell, (believed to be new, well, unused at any rate) complete with doors & rear glass, offers @ £ 150

For Sale :- R registered Kitten estate. No tax or test, needs clutch and gearbox fitting. New clutch plate boxed. Spares included, including 2 engines and 2 gearboxes, 2 complete front assemblies. £ 200. No offers.

For Sale :- Kitten saloon. One owner since 1976. House move forces sale. Desert sand with factory alloys. 86,000 miles. Recon gearbox, new clutch and exhaust, rebuilt brakes, all in the last 4,000 miles. M.O.T. Jan 2003 and 5 months tax. Some spares. £ 500, no silly offers please.

For sale :- Reliant Kitten saloon, the Martin Blunn car. 1 owner from new, this very original car is needing a new home. the car is in the north east of England

Exchange :- Rialto HE diff (or axle) for Robin one. John Blagburn is looking for a 2.57 Reliant diff, and has a 3.13 to swap.

Wanted :- Robin / Kitten saloon rear window. Contact George

Wanted: A pair of Fox doors with hinges and locks, condition of metalwork around the glass is unimportant, yes unimportant. Also rubber windscreen surround, must be in first class condition, would take a good windscreen too if within reasonable distance of Beckenham in Kent. Jim Lugsden

WANTED. Air cleaner for 850 engine, the type which has a spout poking down to take warm air from the manifold.

Wanted :- Foxes, M.O.T. not needed. Contact Steve Campbell

Wanted: 750cc engine(s), complete with manifolds, carb etc. In running order. Contact John Dixon on

Wanted :-. Left hand drive Kitten, preferably an estate, contact Mike

For sale Reliant Rialto hatch. New radiator, stiffened rear suspension + extras. taxed and M.O.T.'d. till September

## NOTES

Ahh, my regular soapbox opportunity once again – what to talk about this time I wonder. Well the silence has been pretty deafening as regards responses to my question about whether anyone takes advantage of the information about events advertised in these pages. So, if there is no response from you by July, I think I'll drop that section completely. Comments, protestations whatever, eagerly awaited.

As ever I am frustrated that many, if not most, of the enquiries I receive are from people who are wanting to sell a car, and their first contact with me is to see if I can help find a buyer. O.K., it is not actually that bad. I have just done a little checking, and of the last 20 people to get in touch for the first time, only 6 were in fact trying to sell a car – so it's all in my mind really!

I see, interesting because I would argue that it can only help increase the values of our vehicles, that a new 'dressed' engine for our cars now retails at £1862.50 plus the dreaded V.A.T., which puts it well over £2,000. Even a bare engine, comes in at over £1,500. Now by fully dressed, they mean complete with manifolds, carburettor, distributor, starter, alternator, water pump, oil filter, and even the plug leads, but it does make you realise that we are selling ourselves short if we sell the cars too cheaply. I mean if you think how common the engines are, (tens of thousands of them out there, even today) and how rare our cars are, makes you think, does it not?

It only remains for me to wish you happy motoring, and of course to ask – when did you last grease those ball joints? No, let me re-phrase that, either get out there and do it NOW, or, if you do not have a grease gun yourself, find a garage or a friend who has, and get it done NOW! A set of new ones now retails at over £200 by the time you include the V.A.T., and that is just the bits, so look after them. It's O.K. Douglas, the ones on the wee red car were last greased in April 2002.

Brian

## Effective Preservation Makes Good Economic Sense

For detailed information on our up-to-date range of easy-to-use and effective engine and workshop protection products visit our web site or write or telephone for free catalogues. Enginewise Dehydration Kits. Plugs for 10,12,14 + 18 mm threads in 2, 4 + 6 plug kits VZK Corrosion Inhibiting Oil. Turns any mineral oil into a preserving oil —top up every oil change. Wokshop Dehydration Kit. Keeps components + instruments corrosion free even in damp workshops. Enginewise Closure Kits. An invaluable multi-purpose aid to restore and store engines safely. Hygrometers. Do you know how much humidity you suffer in your garage and workshop?

Oil Drip Pillow, Barrier Rug, Heavy Duty Maintenance Wipes. Help to keep your workspace clean.

## (ENGINEWISE)

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