





The Oz Vincent Review is an independent, non-profit, *e*-Zine about the classic British motorcycling scene with a focus all things Vincent. OVR, distributed free of charge to its readers, may be contacted by email at <u>ozvinreview@gmail.com</u>

Special Covid-19 Self-Isolation Edition



WARNING – Contains Explicit Adult Content ! Don't Say You Weren't Warned..

Alice Leney, International Garbologist and now self-isolation inspired author of Motoerotica has responded heroically to the OVR call for articles. In self-isolation on his rural property on the north island of New Zealand, this is his monumental, edition filling, amusing, lavishly illustrated and at times confronting guide to maintaining a Vincent Twin or any classic British bike.

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Love in the Time of Coronavirus



(with apologies to Gabriel García Márquez) By Alice Leney, New Zealand

Oh! Woe is me! Locked in the shed with my Beauty, unable to go past the gate. The Police told me to stay here, and the wife said I could only come out again via the shower, and not before eight-thirty after Downton Abbey was over. Hell on Earth...

Come my dear, let us commune in our Deepest Love. Let me whisper sweet tuning tips in your ear as I Polish your Ports; let me Tickle your Tappets to hear the Tinkle of your Laughter. A caress of your chrome to see my joy reflected in your eyes; can I run my fingertips over your powdercoat? Commit calumnies with your cables? Enliven your eccentrics and fettle your FF eighteens...? Oh! Love!

You're obviously not bored yet, wait till we've been locked down for a month!

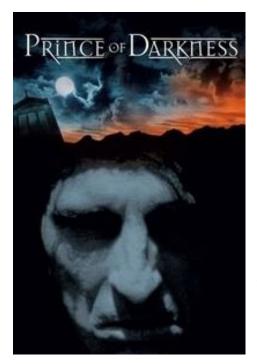
Those hot flushes always wear off once you've got past the Bunny Rabbit stage and you've looked again at the hole in your bank account, so may as well get real and start in the way you mean to carry on. Plenty of time to polish the chrome plate when you finally clean your hands properly, but in the meantime, this is your big chance to get down and dirty.

When was the last time you took the RFM out and picked the crud out of the bearing and the brake cross-shaft? But before you do that, how is the play in her rear end? Need a touch shimming up does she? Always looks like a big job, but in fact it is not so bad, especially if you had the forethought to make sure you have a big packet of shims before you start. Every nice girl needs a wee bit of shimming once in a while. But I'll return to caressing her rear end later; first, give her a nice hot wash down and get her up on the bed – I mean bench. Make sure she is comfortable, relaxed, and won't fall down on top of you just at the vital moment, that's a guaranteed passion-killer.

If yours is one of those little-red-dress types that goes hell-for-leather all night with a good charge of extra-special Ommph – imported from South America – up the intake orifice, and falls to pieces when the sun come up, then please turn to the racing pages: the following is not for you. Here we are concerned with the long-term relationship, one that follows the gentle ups and downs of married life, the occasional dollop of chrome plate to keep her happy on special occasions, the every-few-years divorce-thoughts of sale (that never come to pass) and the odd swearword. Where shall we begin?

How about starting with those poor cables: they've been sucking up road dust and rain for the last five years (you never go out in the rain? Well the corrosion of inaction may be worse). Take them off, clean them up, have a good peer at them. Is the inner showing any signs of stress? – usually by the nipple where its been rubbed too hard. Fix it now: unsolder one nipple and make up a new inner whilst you have the old one to make the job very easy, and get the length right so you don't have to do the job twice.

Has her outer got some cracks in it? (Nineteen fifty-two was a long time ago.) First question then is why? Nasty bends? Rubbing in the wrong places? Too much time lying in the sun? Fix it now, the root of the problem, not just the symptom. Then make – or get - a new one. If that cable still has a bit of life in it, it is your spare, you can roll it up and stash it, cable tied, to some obscure part of the bike so that if you do ever get caught out on the side of the road with a broken cable, you won't be caught out for long (if only you can remember where you hid it).



Electricals: off with the dynamo cover; get a torch – your eyes ain't what they used to be. Commutator look nice and shiny – or black and grimy? A pencil, a small piece of soft cloth and a bit of meths – or cheap brake cleaner – on the rag and a few turns of the engine will have it looking like new. Are her brushes moving OK? Not too worn out? She won't deliver that electricity if her brush isn't trimmed right! Prise the spring to one side, hook them up (no need to unscrew the terminal) and give then a wipe. The top of the brush should be around the top of the holder, if it is much below that it is getting worn down, and in a while the spring will rest on the holder not the brush, and the Prince of Darkness will find you out!

There are some rubbish pattern brushes around too, if you don't think the bike went very far since you put new ones in and they look worn down, throw them away and get some decent ones. A good set with a clean commutator will go a long way past 30,000 miles. Check the three tiny

screws that hold the fibre plate with the brush holders to the back of the dynamo: if these come loose, the plate moves as the brushes jiggle it around, and then the plate breaks - it is over 60 years old - and then the Prince of Darkness arrives. Luckily they are very small and you can only get a very small screwdriver in there so you can't do them up too tight and break them - can you? And while you're in there, make sure the wire coming out is well protected and led nicely, and not being pinched or cooked in the hot crevices of her motor.

Having got warmed up with Mr. Joe and his genny, pull off that mag cover and have a look in there. Give the whole thing a good clean before you uncover anything: 1. so you can see what you are doing; 2. to keep the grime from getting in when you do open it up. Start – taking it nice and steady - with the earth brush, and work you way gently up to the hot buttons at her other end. How does that brush look? Nice and clean? Or oily and dirty? Oily might mean the mag seal is a bit iffy and oil is getting into the mag past it (does she blow much out her breather when she's hot?). Dirty might mean that the pickups aren't seated nicely and the shit is getting in that way.

Worn out means put in a new one (but use a short brush, not a pick-up brush; if you try and shorten a long brush you can expect to end up with a lot of broken bits unless you are very careful). If it is very oily and filthy under the earth brush then you might as well stop right there and pull the mag off and clean it out, and do everything else while it is on the bench. (If you do get to take the mag off then as soon as you do so, unscrew the armature safety screws DO IT NOW before you forget to do it later and root the slip ring. If you don't know what the armature safety screws are then you probably shouldn't be taking it to bits.) But a nice clean Magneto Earth Brush is always a warm fuzzy feeling, enough to make you swoon and want to play with her points to give her a real nice tune up; make her growl and sigh and give you her best in the first light of the early morning mist...



Back to more important things (the X-rated bits come later) pull those pick-ups, and see how they look. One at a time: start at the bottom, clean around before you unclip and take it off, watch to see if dust or anything else comes out. Water is a real problem if you see that come out but it should be pretty clear how it got in there! The bottom pick-up usually holds all the shit, so carefully take it into the light and see what is lurking in there. Clean it up. Make sure the thick sealing washer is good. What washer? Now you know how all that water and shit gets in. Does the clip hold it down well enough that it tears you fingernails to un-clip it? Good. If not, unscrew the clip post and give it a tweak downwards in the vice. Brushes are very important: again, plenty of dodgy ones to be had, so when looking for brushes you are best advised to buy them from people who fix magnetos, not some Supercheap Pom-Bomb Parts site on e-Bay. To save \$2? About THE most important part of your ignition system (beside those lovely points you are going to stroke and polish with your caresses in a moment).

You might need to unscrew the pick-up clip post to get the top pick-up out easily: taking a little extra time to do this is better than bending the brush spring all out of shape as you wrestle it out under the barrel, knackering the cork washer and chipping the Bakelite pick-up in the process. Don't mix up the pick-ups, do them one at a time. How is the washer on the end of the HT lead? Nice and loose? Well sort it out, a floppy lead that isn't firmly held is about as much good as a school boy who is too young to be – you know what



I mean, he shouldn't be doing it. The plastic nut loves to hold oil and grime in its teeth, all things that will take some of the spark out of her passion, so clean it up now instead of complaining that she is not as keen as she used to be. While you are at it, how old are those HT leads? Did you make then from a coil of cable you bought in a sale thirty years ago (when it was already forty years old?). You could always think about making some new ones, especially if that insulation feels as hard as a honeymoon cock.

Talking of getting some passion back into the whole business, get a bit of soft cloth and wrap it around your finger, put a bit of meths on the end, and stick it into the lower pick-up hole so that you are holding the damp cloth against the slip-ring, and being very careful to hold your finger against the side of the hole, get your mate (plugs out) to kick hard on the kickstart with a big swing. That lit your eyes up didn't it!! OK, go and have a cup of tea, and reflect that you have just touched the soul of your machine. If you have a pacemaker fitted, now is the time for your mate to call an ambulance. Make sure you left a will too before you did that (did you leave the bike to HIM!?).

Now you are warming her up, and your probing fingers have worked their way up to her points. Oh Joy! The True Spark of Passion, the Light of Ignition; the one place you are bound to have an argument over by the side of the road sooner or later. It always comes to pass once you have known each other a few years and have become too quick to find fault with her foibles. But that is later (or before); at the moment we are enraptured (remember you're locked-down and you still have a month to go). On to the business: you already cleaned around the cover, didn't you? Be sure you don't get any hair caught in your teeth (that is if you still have any). Before you take it off, have you got an end cap with a cut-out wire attached? No? well put that on your list of things to do. Stopping your Lovely with the valve de-compressor is giving her lifter a battering every time you do so, and may well end up dropping a nice little roller into her guts just at the wrong moment, which may cause sufficient indigestion to result in a major spew of parts all over the road - if you are REALLY unlucky. Why would you want to even contemplate doing that to your Darling? But then again, when she's lying on her side screaming for help with a throttle wide open after you slipped up trying to impress some other floozie by doing donuts in the carpark, holding the valve lifter open is not going to alleviate her agony either, but probably just break a few more bits instead. So go on the Spares site and open your wallet and chase the moths out and buy one right away - not next week.

Now you have the cap off you've revealed the darkest secrets of the Love of your Life. After you've finished wiping the sweat off your brow, and having retired for a cold beer to cool your ardour (or increase it, as the case may be) don't do anything until you have measured the points. Ah: which gap to measure? The top or the bottom, they open twice each revolution (we talking Big Girls here).

Measure both, and write it down in the notebook - the one that you haven't had with you all along – in which you are writing down everything you do. After finding a notebook (the back of an envelope *won't* do as you will certainly loose it by the end of the day) you can measure both points gaps and find out that they are: *about four thou different*! Consult books.

OMG! My timing is everywhere, etc. etc. Unless you are going racing (in which case you should have stopped reading when you got to the Red Dress and de Coke) it probably won't matter too much;



but if you do understand what is going on you might be able to do something about it. First question is: how does your Beauty run? Does she Make Me Smile when you amble together down the country lanes? Does your heart Leap with Joy when you power past that logging truck in an instant? Or do you feel she's a little out of sorts, that those last set of chrome-plated gigaws did not make her leap in ecstasy, that every time you ask her to go out with you she ignores you for at least a half dozen pokes of the starter, that when out and about she can pack-a-sad at merest sight of a cheap gas station or a traffic snarlup? Might be something to do with this.

Having measured both gaps and written it down - as really, you do know you are going to forget it in spite of insisting you have at least another ten years before your dementia kicks in - *don't* now take the points out, but have a really good look at everything first. Is the cam ring oily? Should be a tiny bit: if you can see it is oily, then its probably too oily, but if you can't see it is oily but can feel it is oily, it will be just about oily enough. If it is as dry as a witch's tit then it is not oily enough: you are probably doing a good job of munching your way through the fibre foot of the moving point, and this can upset the geometry of the whole business in ways you (and I) never imagined. If the points gaps are different, it can be caused by two main things: the cam ring is worn funny – or wasn't



made right to start with – or the armature is not spinning dead centre to the cam ring. First one can be dealt with by buying a new cam ring (current delivery time about eighteen months with this Coronavirus business); second *may* be possible to deal with quite easily. But at least now you have some idea; not so you can worry about it, just one more detail to add to the list.

The only big question for an old touring trout is 'How does she run?' If she runs nice enough, then don't get bent out of shape because she is not perfect: you are no more Barry Sheene than she is Gina Lollabrigida. She is a conglomeration of imperfections: it's the end result that matters. If you're trying to win races then as I said you should be looking for spunky girls in little red dresses, and they are a different kettle of fish altogether. If your Darling was running fine then ignore the following and just take the points out and clean them.

Next thing, if you are really keen, and not the worrying type, is to measure the timing on each cylinder. Make sure you know which cylinder timing relates to which points gap.

Write it down. You can split the difference when you next time her up if you know what you are looking for. Use the same method to measure your timing each time or else you are introducing another bag of ferrets. The time-honoured fag-paper and a broken spoke with some marks notched into it with a blunt file is perfectly adequate for your old heap – I mean your Resplendent Rose. *Now* take the points out. The book usually tells you to undo the centre bolt and jiggle it around until you knock the points plate off the taper and the points fall out; I must have done that for forty years, until one day, after swearing at a particularly recalcitrant BSA, I discovered that the points bolt was slightly bent, and it

pulled the plate slightly to one side when done up! How did it get bent? Must have been forty years of being heaved to and fro to get the points out... It was fine for the first thirty... Try a different approach: get a small screwdriver and very gently insert it between points plate and cam ring and give it a little prise and jiggle and 'plop' out they come! (I hope you took the centre bolt out first or else we probably made a whole lot more trouble for you. But Hey! Got lots of time, haven't we? Could be March 2022 before we get let out again.)

Now you have the points out, first thing is to have a good look at how the two contacts are sitting, before you take it all to bits. Manipulate the fibre foot so the points open and close, and just get a feel for how well they are kissing each other. Ideally, it is just a touch of nicely puckered lips to a domed point, but that usually only happens when they are brand spankers out of the box, and weren't made in India. If the points are closing at an angle rather than square, this can make your Dearest a little doddery in the mornings. If they look to be really worn down (helps to have another set to compare with on this point) it can upset the whole geometry of the set-up, in words I cannot describe as I don't quite get all the sines and co-sines involved, but it does, and you'd be well advised to throw them out and get a new set. Or at least go rummage around and see if you can find a not so knackered set in you 'mag parts' box.

Now go stand over the dirtiest and most chaotic part of your shed floor, or over the most piled-up part of your bench, take those tiny screws out, and loose all the bits when you drop them. Alternately, clear a space, put down a nice clean tray and carefully take the screws out and place them in the tray nicely laid out in the order they came apart so you can see what you have got. Those tiny screws that hold the points leaf spring in place are especially designed to go into orbit when you undo them, so get smart, slacken them both a touch, and take the moving point off the post *before* you take out those spring screws. If you've got the old brass plate points, have you got a little tiny *plastic tit* that sits under the clip that holds the moving point in place on its post? No? Neither have I generally; you will have to demolish something like an old Biro and make one. Be careful not to break the black insulated tube with a tiny flange on the top that insulates the centre bolt from the plate. Haven't got one of those either? Was she running like a whore with the flu? Might have something to do with it. Leave the



fixed point still screwed into the block that holds it so you have something to get hold of when you get stoned.

Now you have it all to bits, and haven't lost anything, get a magnifying glass and peer at the points. They almost certainly have some pits showing, hopefully not too deep. If there is anything that looks like corrosion then either she hasn't been getting enough exercise, your shed is damp (you never ride in the rain, do you), the roof is leaking, or you didn't clean up the beer you split over her when you were showing off in the shed to your nephew last year. If there are signs of breaking up around the edges, or the points are clearly worn out of square, then get a new set (or go and have another look in your 'mag parts' box). But if they look OK, get your whetstone (the nice flat one that you keep in its box and only use for points and special knives, not the one you use to sharpen the garden sickle) and with a drop of thin oil on the stone, give the fixed point a twirl around and see how it

looks. Use the fine side of the stone, and if you start with the fixed point it is easier to get the hang of it.



Round and round, holding it flat on the stone, don't press hard, just slide around: imagine you have your arm round her waist, and you are twirling her into a sensual shine. Stop after 20 seconds, wipe it off, have a look through your glass. How does it look? If you think you are going to have to use the coarse side to get rid of the pits then it has definitely been too long since you polished your points. (Or your mag might have a developing problem.) If the pits are really deep and you go on and on to get the last skerrick of a mark out, you are wasting good points material.

Knowing when enough is enough (she's not wearing a Red Dress, is she?) and you'll see you have a pretty good

surface with only a few tiny faint dark patches. If you can see scratches through your magnifying glass then either your stone was too coarse, or your glass is too powerful. Should be a nice matt/shiny surface. Keeping the point square with the stone during this operation is the trick. If you think you really got the hang of it, you can put a slight dome on the point so that you get that nice puckered kiss that drives those young girls wild; but as she's more likely to fall into the middle-aged athletic type with lots of life still left in her, taking a more whole-of-system approach is more likely to keep your dinner on the table.

Where were we? The moving point. These are a bit harder to dress, as you can only get it on the corner of your stone. That's why you started with the easy one. Same again, but you can only go gently round and round on the corner. Thin oil – even kero – is essential. Fine Wet & Dry on a solid flat base like a bit of plate glass works well too. Hard to get the puckered kiss-dome on this one, but you can always try.

But before you do that to the moving point, does it fit well on the pivot post? If it is like the proverbial cock-in-a-sock then it's probably jiggling all over the joint. If it is badly worn, then this is hard to sort out, unless you are very handy, or have new parts. You won't need advice from me if you think you can tackle replacing that worn out pivot post.

The fibre foot is important too: make sure the rivet is good and it is not slopping around; if it is worn to ridges then it's pretty stuffed. You probably already rejected it for another reason anyway.

Before you put it all back together, make sure that the taper on the back of the points plate is very clean, and the taper inside the armature shaft is very clean. A bit of shit here can make the plate sit crook and contribute to those funny points gap troubles. Another thing that can do that is if the little bit of brass that is pushed up as a key on the taper is too high, or too big, or generally not right,



so that the plate doesn't sit exactly square on the end of the armature. Have a good look at it all, and make sure it all fits nice. Having an old armature to hand to check things out on the bench can help. The key need only stick up a tiny bit to locate on the armature correctly. Getting the points plate orientated correctly on the armature is all about magnets, coils and flux points and the dark arts; sometimes you even can manage to fit the points plate from a different make of mag and really give her a headache (not to mention the one you get trying work out WTF is going on) and on Lucas mag/dynos there are left and right hand cam rings depending on the rotation, both will work, but one works a whole lot better than the other!

While you are looking at the points plate, assuming it is one of those old brass ones, see that blind hole in the back? That's where the earth brush goes. What Earth Brush? Anyway, you don't need one of those everyone knows that. That's what I thought, and was told, for many years. We all love to discover those bits of our machine that it doesn't need and some old fuddy-duddy designer from 1932 put there for no good reason and the British industry was still making it the same way 137 years later because no one changed the drawing. Well, that earth brush in the back of the points falls into that category; or so I too thought for many years, until one day by the side of a very busy highway, with logging trucks polling past at a canter, and a dead Vincent



in my arms, I took a punt. Melvin had stopped for no apparent reason – no spark. I took out the points, cleaned them, put them back. No spark. I pushed across the road, pushed him down the hill: no joy. A man on a bicycle stopped to provide assistance, and we both pushed. Much sweat, even less joy. I took out my spare points set and was going to put them in, and noticed the old spare set had an earthing brush in the back. Took the brush out and stuck it into the points plate, and off he went and had never ran better!



Went home and applied the same treatment to a BSA twin lurking in the back of the shed. Same result! Everyone will tell you that you don't need that brush (later style points never even had one) but I can tell you, someone put it there for a reason, and she may sing better with it.

Having cleaned and polished and coruscated to your heart's content, now put all the bits back together. Make sure all those very thin insulating bits are spotless and go back exactly as they came out. Not sure? Consult the book. Ok, now rearrange them so that they are now in the order that they should have been, and put them back together. Points don't quite line up? You can shim the fixed point in or out a touch by using the very thin insulators under the fixed-point brass holder, so getting her just that touch more in tune. Put a *tiny* dab of moly grease on the point pivot pin (think how many times that little joker is going to go back and forth before you next pull him out) and if you are really smart, put the moving point on the pivot, screw one spring screw into the spring end on the point, and then pointing the whole assembly at the scrap metal pile

in the corner of your shed, bend the spring around with one hand, hold the tiny screw with your second hand, and with your third hand pick up the screwdriver and 'Ping' you can fire that tiny little sucker into the scrap metal pile where no one will ever see it again. Well done! Not everyone can do that, but most of us have at some time or another.

Alternately, before you put the moving point on the post, screw the leaf spring to the point, but don't do it tight, and then screw the other end of the spring to the points plate, and don't do that tight either. Now you can gently lever the moving point over its post, and the spring can jiggle around to suit, and *now* you can do up the leaf spring screws – not too - tight. One thing to watch with that leaf spring: first, there should be two of them; second, you might have had a very tiny bent bit of spring that came out with it, this goes on the underneath of the end that screws to the points plate, curve pointing inwards; third, push the spring down on the slotted holes(should be at the points plate end) before you do up the screws so that the spring is closer into the points plate.

Reason is that sometimes those leaf springs can just touch the cam ring as they spin around, and this will give you a miss, or even stop you. If the ignition goes suddenly, look at the points, see if the spring is touching the cam ring at some point, and check the tiny screws that hold the spring, especially the slotted end. A loose spring can stop you. And



gorillas love to do those tiny wee screws up nice and tight so they don't come loose and so strip their threads out so they *will* come loose. You won't be able to check all this until you put the points back, but you will have to take them out again to adjust the spring if need be. You also need to make sure that the spring isn't too far to the inside so that the end of the moving point touches the inside of the spring, this doesn't help either, especially at higher revs. To top it all off, you generally need two *slightly* different titchy screwdrivers to fit snugly into those two screws - yet another gotcha from The Prince!

If you didn't move the engine at all during this operation – and why would you? – and if you took the points out at the same place that you measured the gap, you can put the points back in and re-set the gap to what it was before. It will have changed, because you took a smidgen off the points, apart from the fact you took it all to bits. You need a very nice fitting ¹/₄ inch spanner to adjust that tiny lock nut, and it needs to be small enough that it has clearance to do the nut up without jamming on the points plate and you *thinking* that it is done up when it's not. How many times have you stopped on the road because the nut came loose and your points closed up? Might be something to do with

your points spanner. Now you adjusted the points back to the same gap at the same place, and as you didn't use that bent centre screw – did you? – turn the engine over and see if the gap at the other side looks better. Hmm, not so bad.

One thing more you can try if you are really keen: slacken the screws that hold the end bearing plate on the mag, just a bit, give it a wee tap with a plastic mallet back and forth just to make sure it is slightly loose, and now turn the engine over a few times to let the points jiggle the end piece a tiny bit (you did clean it all around the joint before you did this, didn't you cause it's VERY important not to have bits of shit fall into the crack).



Now carefully go around and do up the screws a tiny bit at a time, criss-cross until it feels like the end piece is nice and home, pulled down as evenly as you can get it. Now measure again. If it's all gone completely to shit stop reading right now and ask for your money back. But if it hasn't, you might find that although the gaps aren't 100% the same, they might be closer now.

What you will have inevitably done with all this messing around is alter your timing to some extent. One approach is to now take it all to bits and re-time the magneto (and shorten the life of your ATD teeth in the process). If you are really bored you can try that, but if you'd rather go for a ride, leave the front alloy cover off the motor, take your mag spanners in hand, and go and make love to your lovely.

The simple facts are, that the following is heresy, but I can claim some authority by looking



in the Gospel According to P.E.I. at page 159. A good mag will actually operate quite happily on points gaps from eight to fifteen thou, although the usual parameters given are more like 10 to 14 (it is all about flux points again), so use those if think I am offering overly ambitious numbers. If you close the gap, the timing is retarded; if you open the gap, the timing is advanced. On one of those big floozies we love to love, a sixth of a turn of the fixed point (being one flat) is around about 2° and a thou or two, so you can see that if you get your Darling nice and warmed up, and she's all spic and span and feeling Glamorous and Amorous, if you go for a good afternoon's run of 100 miles or so, and be prepared to stop every twenty and lie at the side of the road with a torch in your mouth and a set of feelers and two points spanners in each of your three hands, you can tune that little sucker until she would pull Christ off the Cross, or there-abouts. Like finding her Sweet Spot and not rubbing it too hard.

Or just throw the whole lot away and go and buy a BTH for a grand. And wonder how the fuck it works...

It's all very well having her singing with desire and just over the moon with anticipation about finally getting a good ride in, but not much use if her knees are no good. You can't get down without good knees.

So now's the time (plenty of it, if the lock-down gets extended by another 90 days) to get into her wheel bearings, which means *you* getting onto your knees, buddy. Get her on her back (stand), and before you get those spanners out and give



her a good rodgering, jiggle her arse and see how much play there is, both wheel and RFM pivot bearing. There should be a wee bit of shake in her wheel, but nothing in the RFM.

You need to take the wheel out whatever, because when was the last time you cleaned all that gunge and brake dust out of the drums, cleaned out and re-greased the wheel bearings, and checked her shoes to make sure she was wearing them right and they weren't sticking in odd spots and giver her blisters. Not this last year? Do we get the local tyre shop to change our tyres? This isn't part of their service – not for those tyre prices anyway. We all know how important shoes are to a Fine Lady, so get with the program. It does nothing for her deportment to have a stone in her shoe.

Usual thing: don't just tear it all to bits and throw it into a box under the bench, and work out what goes where later: take each bit off carefully, inspect, make sure it looks OK, mark everything in some way so it all goes exactly back how it came apart, unless you decide to change it as some point. Go and look for the notebook again. Lots of shims floating around in here, and often one will stick to the brake plate and then fall off later when you are not looking, which will make you scratch you head when you put it all back together wondering why if it was alright before why is it not alright now? Mark each shoe before you take it off the plate, so that you can put them back exactly the same way around.

Much grime in there? How thick are the linings? Still got rivets? That means that they've been around since Adam was a boy.

Fine Ladies rarely like going out in old shoes, they are what you might wear around the house, don't expect her to strut her stuff with the other Vins if all you can manage is to make her keep wearing neolithic footware.

Play with the brake lever and make sure everything springs back as it should. Anything obviously shaky as it is? Make a note about anything that doesn't seem quite right, and check it out later. Now you can take her shoes off: pull out the split pins, take off the brake lever, and back off her nipple – or even take it out. Her nipples can stop you



getting her shoes off if they get in the way of the shaft and make it stiff. But if you slacken her nipple you can push the shaft past it and – if you are gentle – use a Screwdriver to finally get her shoes off. (If you don't know the best way to handle a good Screwdriver ask a competent bartender.) If you are smart you can do all this on the bench, but it can be done on the floor, but put some old newspapers down at least, or she'll get Dirty.

If you were on the floor, now get back on the bench, because you are going to need the light to see what you are doing next. You should have one pair of shoes out, along with a brake plate and some shims, and the other brakeplate and shims still in the wheel. Turn her over and get a big spanner and holding the brake arm so the brake is on try and slacken the big flat nut on the other side. Whoops! All the bearing and shims and

everything just fell out the side you just finished working on. Pick them out of the filth of your workshop floor, and throw them in a box as now you really got no idea what goes where.

After ten minutes trying to get that big flat nut undone, skinning your knuckles on the brake lever, swearing, and wondering if it is time to stop for a beer yet, finally come to the conclusion you can't get it undone. Take the whole shooting match out of the wheel, put the hollow axle into a big vice, do the vice up with three feet of 2 inch waterpipe over the handle, and crush that sucker into oblivion. That'll teach it. Now you can get that nut off. Don't listen to people who tell you that you ought to have some bits of aluminium angle in your vice jaws for jobs like that, they are sissys. Real men have real girls who can take anything you hand out to them, and won't break down and cry (they'll just cost you a lot more money).

Now go back to the hub, and look for the shims that were next to the shoulder – on the inside of the bearing – which hopefully are still stuck in the grease where they fell off when you pulled the axle out. Clean all that horrible hard, filthy grease out that was put there in 1967 by the last guy who did this, and find some of the mangled shims that he lost when he took it apart back then. Clean up the whole caboosh: drums, hub etc. and have a real good look under a strong light. You are looking for two main things: are there any cracks in the brake drums or do the outer races turn in the hub? You'll need to get all the rust out to check for the first, and for the second, after a real good clean, see if you can turn the outer race with your fingers at all, see if there are any signs of it moving - like a polished ring just above it. Turn the wheel upside down and bag it flat on the bench, and see if the race moves out a touch at all. If it moves at all, not unusual after

so many years hard work, a smidgen of Loctite will do the job. Usually a bang on the enough bench is (mind one of those loose nipples doesn't get caught under your drum) and out it will come: and with a bit of a clean and a drop of suitable loctite (638 will make a real good job) you can bang her back in again. But whilst you have it out, have a good squizz, and check no cracks, pitts, scratches, dents, divots, canyons, crevasses (all the usual stuff) and biff it into your 'round things' box if it is at all suspect. You'll need a new inner for it of course if you do, unless you are really cheap.



Now everything about her knees are clean, happy and ready for refurbishment (you did clean all the bits didn't you?) take the bearings, and the shims that fell out, and put the right end one on the right end of the axel (you did mark it all didn't you) and put some shims and odd bits from your 'round things box' on the outside so you can put the flat nut on and lock it up, pass the bare end through the hub, and then do the same on the other end. You need shims on the inside to make sure the inner races are held far enough apart, and shims on the outside to make sure the brake plate is held out far enough. If everything went back without touching anything, the clearance felt right when you checked in the beginning, you didn't loose any shims, and made a note of which shim went where, all you need to do is put it back the way it was. With lightly oiled bearings, the whole set up should have around 3-5 thou end float (back and forth shake). That is about enough so that you can clearly feel it is there, but it doesn't feel 'loose'.

You must do the nuts up reasonably tight on either end to check this, or else you won't get the right feel, that is why you may well need some small round bits to take up the clearance. You need to have the right spanners for those nuts too, a Stilson on one end and a vice grip on the other is *not* suitable. If you don't have any oil on the bearing it might feel unpleasant, it should run nice and smooth, just how you want your Darling to feel: she is going to go mile after mile on those wheels, imaging how unpleasant it must feel if they are rough, and add insult to injury if Your Man can't be bothered to take the trouble to get it right. And you wonder why she gets bent out of shape at you sometimes!

You need the clearance because the bits in the middle are much harder (steel) that the outside (alloy hub) and the softer outside grows and gets tighter as it gets hot, but the steel bits don't adjust and if it is a big mountain you are going down and you start braking hard so you don't fall off, as you work harder and harder the soft bits can end up gripping so hard that the middle seizes up, and then all hell breaks loose. It can put your relationship out for months as you might need to get your wheels rebuilt in a real bad case, which will probably mean going to see a consultant.

If you are lucky it all goes back together nice and easy; if you change a bearing, you are sure to have to re-shim, and you may need more shims, and if you didn't order them before you started you are buggered until they develop a vaccine (one to two years?). However, you can try cutting up beer cans with Madam's nice sharp curved manicure scissors, but don't blame me if she catches you doing it. (No, beer bottles don't work, but you can always tell the missus that is why you have to drink so many right now as her eyes will have glazed over at the mention of the word 'shim'.) Now you have to set up the brake plates



so they are far enough out that they don't rub on the brake drum, but not so far out that half her shoe is swinging in the breeze. Check her shoes for ridges on the outer edge, which is a clear sign flesh that has been exceeding the confines of its dedicated area, and set about it with a file gently. You might have some of those nice Nilos bearing seals: they need to be set up such that the inner edge *just* rubs onto the outer race of the bearing: if your brakes shrieked sometimes, it may be them wot's doing it: you might need a very light shim between seal and bearing. They stop the grease coming out, making her brakes work even less.

Now you have worked out where all the bits go again, and everything is nice and clean, put some nice dark grey molybdenum disulphide grease on those bearings, put one on the shaft with all its shims (and maybe a spacer), put the nut finger tight on the end, drop it



into the hub, turn the wheel over so you can work on the other side and it will all fall out on the floor and roll in the filth so you can start all over again.

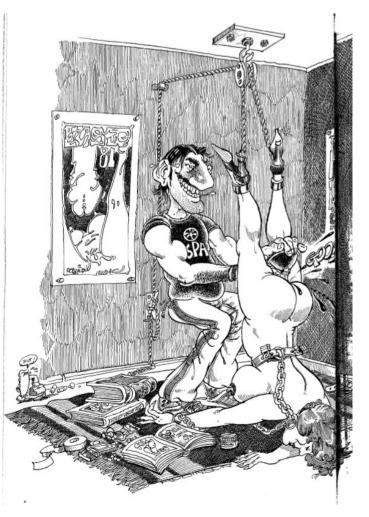
Having got back to where you were just before you turned it over and it fell on the floor, hold the wheel straight up and fit the other side. Use your temporary spacers on the outside to put the other nut on so it can't all fall out again. Now to put her shoes on again: a nice light smear of lube on her pins, and then put a bit on your little finger and gently work it around and slide it in and out shaft hole around the until everything is nice and slippery and you're sure you wont get any nasty dry rubbing, then lube up the shaft and slide it in just as you slip her shoes on. Make sure the nipples don't get in the way, you can play with them later after everything has settled down. Get your split pins in now to make sure your shaft doesn't fall out, and sit back and relax. Give her a spin and watch her go! If you get a screeching sound you're doing

it all wrong. Take it out and go and have a beer and try again tomorrow.

Talking of tomorrow, you can do it all over again, this time at the front. If you spend too much time messing about with the rear end and not enough at the front, you'll get all out of balance and people will talk (not to your face of course, only on Club Nights when you are not there). The front is pretty much the same as the back, except the for one thing. The legendary 'previous owner' – who was never as nice as you, and who has a one owner Lovely today I ask? – might have knocked her around a bit in the speedos department. Brutal application of a punch to ensure that the speedos never come off (the gear on the soft hub that is) is brutality that should never be condoned, ever. The gear will have to come of sooner or later, and who cares who takes it off, as long as it is consensual? But there are those of a Medieval bent who only think about making sure the gear stays on. It actually should be quite easy to get on and off, you shouldn't have to fight about it. But - 'bash-bash' - they drove that centre-punch into the hub and now it won't come off without some very careful work with an eye-glass and a Dremel.

But before you do that - and you only need to take the gear off if it really needs it check the outer race that side, and if it is loose, do not try and move her gear until you got the race tight again. Usually the race won't come out because of the previous perversity, and then you need to clean up that internal diameter first before you take her gear off. If you knock the outer race out after taking the gear off, and the 'previous owner' has committed unspeakable acts on the soft parts of her hub, you may well break things and it'll never be right again; the distance between careful nurture and ignorant disaster in this matter is not very far. If the gear is half OK, and the outer race looks good, leave it all well alone and buy a soft plastic small piece of gear for her drive box and she'll be quite happy with that for a while. Make sure its got a new battery.

While we are at the front, take out the damper and the front spring-boxes and clean it all up and see how floppy she feels on the front end. First the spring boxes: these are great fun: there are several ways



to deal with these, most of them expensive, painful and embarrassing, but make for good stories if you're not shy. The best one is to move the forks to the right lock, then remove the top spring-box bolt. This can be a bit tricky on full lock, so just ease it back a touch on the bars so that you can get a spanner in there easier. The last couple of thread just before it comes out are usually the hardest, but Boy! When it goes off it makes the most fabulous dent in your tank that will cost you at least a grand to fix. Having done that to one side you might as well go around to the other and do the same there, it won't affect the overall cost much now you've got to this stage.



The next best is to undo the bottom pivot bolt first, but make sure you are wearing Jandels (thongs or flip flops to those of you over the ditch), and your foot is strategically placed just behind the bottom of the fork blade you are working on. This time the bolt should come out easily, and to get the full effect you have lever the spring box off the lower mount with a screwdriver (use one without vodka). With care, this can send you to Emergency and give you a good excuse to put up your feet and drink beer for the entire duration of the Covid-19 epidemic, and if it does go on longer than expected, remember you can also do the same on the other side and get another six weeks of broken toes out of that one too.

For the dull, technical type, who just want to get on, get a piece of wire, thread it under the bottom of the spring box, twist into a loop, hook the end of a small tie-down to that end, hook the other end over your handlebar, and *then* take out the bottom bolt. If you crank up the tie-down to take the weight off the bolt mount, you can swing it back and *then* let the tie-down go and fire it into your foot. This method is more precise if there are particular toes you want to break. For the really dull and boring, buy some of those Dunfey springs and you can undo the bolts with your fingers once you jacked up the wheel and break nothing. Having returned from ER and/or wept over your bank account, take the spring boxes to bits and clean out all the crap that has accumulated in there, for it is that what is scratching your chrome plate.



Clean and nicely greased boxes are joy to jiggle with. The pins and bushes need cleaning out and a bit of grease, unless they are flogged out, in which case lash out and buy some new ones, please Dear... The damper pins top and bottom need to be cleaned and re-greased. Now you have all the friction and spring out of your forks, how do they feel? They should flop around like a Harley Rider's beer-belly, and this is one part of your love-life where getting stiff is definitely not conducive to full happiness. If you are real keen you can take it all to bits and give it a real good clean up and try each shaft in its hole, but that is a big job, and if you get mixed up and the wrong shaft gets into the wrong hole there will be hell to pay. But if you are up for some deep love without going too far, it can be useful to pull

the steering head off and get the whole front-end in a vice (the water-pipe was a joke by the way) and see how it feels.

This approach will get you fresh, well-greased balls in her head and definitely improve her handling. Her forks should fall into your arms without the hint of restraint, and if you do sense some reluctance then a bit of a clean and a fresh lube might put the smile back on her face. But it could well be her eccentrics are out of whack and this then becomes your big chance to really get to grips with why she shakes her head at every passing Boy-Racer on a Beezzer. To really check her eccentrics, it is best to knock her lower front spindle out, and lift her entire front back over her head so that you can really get at everything. The lower link should be firm but very floppy, if that makes sense. The slightest bit of stiffness is – counter-intuitively perhaps – what is making her look sideways at those Wide-boys once in a while.

How to sort them out is best left to following the instructions of Mr. Richardson, et al., but if you do find that that any of the top hats are a wee bit loose, rather than resort to sending the link to Blighty and waiting three years for refurbishment, a dab of Loctite Liquid Metal or 638 can keep you in business for another few years. (I've had 20,000 miles out of a quite-loose set, stuck back with liquid metal, and it's still tight. Wonderful stuff.)

The one thing that is easy to do is to adjust the spindle end play: slacken the pad-bolt nut at the nut end of the spindle, whack the nut with a big hide hammer to loosen, undo the locknuts, and adjust the inner nut so that there is no end play, but the chrome rings on the link can be spun by hand (you did clean it all first, didn't you). Now do up the locknut, and find it has all gone tight. Try again. Sometimes takes a couple of goes, but you'll get



there. Put your fresh balls and well-lubed head back together (sigh) and adjust the head until you think it could go forever. When you've finally had enough go and get a whisky.

That's enough playing with the **front**; remember you still have a bit of rear-end work to do (don't tell them in the Club): How's vour RFM and crossshaft? Knock that big

pivot bolt out – work from right to left so no chance of bending the engine plate as you bash it out with your lump hammer: use a suitable punch – and then slide out the RFM, complete with rear guard etc.; but you did remember to disconnect the tail lamp wires, didn't you. It should be a very nice tiny-bit-tight sliding fit between the engine plates. If it is loose, when you do that big pivot bolt up you are squeezing her back-end in a permanent vice-like grip, and most girls do not respond well to that kind of treatment. A gentle pat as everything fits together nicely is far more likely to put a smile on her face.

Take the RFM bearing apart, it is the same as the wheel bearings, and so now is the perfect time to do as you just had all that practise doing the wheels and while you can still find

that old tobacco tin of shims easily. Clean it out and grease it; but this time, no play. That is because in the back end everything is all steel, and much harder, and it all expands at the same rate if it gets hot (which it doesn't much) and if it's not tight it will wobble around and really spoil all the fun. So the bearings here want a very light pre-load, but they should still spin easy enough.

Generally, the bearings in there will be fine: but they do get a bit dented in spots as the load is all one area; if you are real keen then you can knock out the outer races and turn them 180°, but their big enemy is pitting from water trapped in there, grit from the road, or the ultimate crime, pitting caused by the bike sitting in one place for too many years (easy to see, so no point denying it if this is you).

While you have the RFM out, make sure the nipples are free and easy and respond to the right touch of lube, and



that the cross-shaft isn't knackered and rusty from lack of care and attention. How can you get maximum fun if your shaft wont slide smoothly when required? Clean it up and grease it up. Before you put it back, make sure there is no water or rust floating around inside her Member, and after you ejected anything you don't like, spray something oily in there to keep it all nicely slippery and lubed-up for the future. Put the brake cross-shaft back, put the arms back on, do up the nuts tight and make sure it moves as free as a bird. Shim up the RFM bearing inside under the end plates if you need to, to bring those flat nuts just out far enough that the whole kit-and-caboodle fits neatly between the engine plates with a light tap of your hide mallet, and knock the big pivot bolt back through.

Forks and RFM back on, wheels back in, cables all oiled, unlived electricals, we must be just about ready to go. Where? Just going to get some milk, Officer...

You rumble into life after a couple of exploratory spins and spits. Your left hand feeds the clutch, your right the throttle, your wheels start to roll. Your blood is working its way around your cams, your valves, your heart, your bottom end, your eyes and ears. Eyes feel forward, tyres feel tar, ears feel engine. You begin to warm, settling in to your seat, your forks finding their new groove, your knees their old bend. Two or three miles, but not enough: the gentle twisting of the country road, taken at a sedate sojourn, settles your urge into anticipation tempered with patience. Twelve miles: now your blood is warm, your limbs shaken and loose, your mind emptied, your love enveloping.

Rumble through the village with the throttle as closed as you can get it, no need to advertise, they have no part in this. Past the limit sign, the road opens ahead, and patience takes the pillion seat. A roar at the straight; into the esses, then a shorter straight; now we climb, the deep growl of a happy heart as we swing around the top, snatching a glance at the view of the Gulf as we gather speed down the other side. A farmer flies by on the inside, the ute meandering with the early morning perusal of his stock, the dog in the back barks as you flick past at a canter. A sharp 25 at the bottom of the hill brings you abruptly along the coast; the cliff above booms back at you the voice of the big Vin, whilst the sea below crashes on the rocks – not that you have the slightest chance of hearing it. A one-lane bridge, but you are across it before anyone could think of coming the other way to slow your fun. You are on the inside of the coast road, heading down; whilst hard to go over the edge this side, easy to slide out on the rock falls of small stones that coat the corners, ready to marble your wheels and instantly double your heart rate.

The sun is shining, your love is singing, those hard yards of getting down and dirty in the workshop were all worth it. Nundge nudge, wink wink; say no more – <u>Does she play</u> <u>tennis?</u>



