

Hi Scott aficionados!!

**Herewith the next Scott
Newsletter July 2017**



The MGP Scott outfit at the top of the Klausen Pass 2013

Disclaimer!

The complete contents of this **social** newsletter are offered to all subscribers purely as a guide only and all subscribers agree to accept this newsletter on that understanding. Any article in this newsletter does not imply any endorsement or implication that the compilers agree with any opinion or services mentioned within it. All subscribers accept that they are wholly, and personally, responsible for checking that any services used are suitable and appropriate for their personal needs. Articles, and services, seen in this newsletter are on an “as is” basis and the compilers make no representations or warranties of any kind with respect to the contents and disclaims all such representations and warranties about the accuracy, completeness or suitability for any purpose of the information or related graphics within. Furthermore, whilst every reasonable effort is made to ensure the accuracy of information, it may contain technical or typographical errors. All liability of the compilers, howsoever arising, for any such inaccuracies or errors is expressly excluded to the fullest extent of the law. Once again, all subscribers, by downloading it. Are agreeing to accept this social newsletter on that basis.

EJP

editorejp@live.co.uk

Info re needles and Jets for Scotts

One good tip for a Scott is to be sure your needle jet is in good condition

If an Amal needle jet carb is fitted, the needle is usually 106

This, unlike the main jet sizes, is actually the bore size of the jet.

The next size up is 107, so you see, it is recognised that even 0.001” on diameter makes a significant difference.

However with the engine and cab sitting at an angle, the needle jet can wear more quickly than normal.

I had some problems and checked the needle jet on a very high quality optical microscope made by Cooke Troughton and Simms for the government. The measurement for a nominal 106 needle jet were,

Sideways 0.108” but lengthways 0.114”

Fortunately these are not expensive and a wise move would be to fit new needle jet and needle before you start looking elsewhere for carburation problems.

Kind Regards

Roger

Vincent to the North

Being Tourists...

This is much better! Warm, cosy, dry!

What more do you want!

I lay in the sleeping bag mulling things over. We had travelled over a 1000 miles, confident in our ability to keep going and were working well together.

The road map tells me that we are only 300 miles from the Arctic circle and, if we clogged it, could be there today.

I shouted across to Liz, what did she think?

"Let's see how we get on. What's the rush!" was the reply. Sounds alright to me. It might be an anti-climax if we rush the day and we are, after all, on only the sixth day of the trip with twelve days left before we have to be back in Germany.

Liz's turn for the tea!

My turn for breakfast!

Coffee, museli, fruit. OK!

Right!

Outside!

What's this!

Sun!

I don't believe it! It's a bright sunny day. Blue sky. Fluffy clouds, all the ingredients for an enjoyable ride. I call Liz, she smiles, "I knew it would get better!" Optimism!

Off we go.

Turn left, head North.

We are in lake country, everywhere you look there are woods and lakes. The sun is still out and we slow down. So much for our riding day! Skogn, Levanger, Verdalsora, trickle past, slowly.

Arctic Tundra is the scenery.

Flat, boggy ground. Heather and coarse grasses seem to be the only things managing to survive in this harsh environment. Goodness knows how people manage to make a living up here!

We are answered as we pass through Formofoss and see a Lapp tent pitched by the side of the road, intrigued, we stop and have a look. It's a tourist souvenir shop but run by a family of local people dressed in Lapp National Costume. Such enterprise deserves to be rewarded and we have a good look through their wares. One of the joys of being on the bike is that it is not possible to carry lots of souvenirs. So I choose a reindeer bone carved in the shape of a knife. Ethnic and worth more to me than any mass produced plastic item. Liz chooses some cloth and is well pleased.

We climb. The sun stays with us. We can't believe we have been spared the rain and both of us glance towards the West to check we are not being stalked by yet more bad weather.

Rhythm is the key to this trip. Getting up in the morning and going through a set routine. Packing the bike, breakfast, getting togged up, planning the day, deciding where to go and compromising on each others wishes. We are both forceful characters. Liz has a philosophy in life that men have too much power, I agree! Also that women can do everything infinitely better than men, I disagree! What I do agree with is that women are inherently more sensible and reasonable and that men really ought to stop playing big boys games with politics and international relationships. As with all things there is a balance to be struck.

Personally we have yet to find that balance.

We see snow on the mountain tops far away as the tingle of excitement starts to be felt. That empty feeling in the midriff that an expedition might actually achieve one of it's goals dreamed of and planned long ago at a dinner table in Roermond, Holland. It was, as I recall, in a Chinese Restaurant where I had taken my lads and their wives for a section meal when the subject of this trip came up. I did not really think that we would make it this far on an untried bike and with someone I did not know well. It was these probable personality problems more than the bike which worried me most. When you are 1500 miles from home and a clash of personalities erupts there is not much you can do except sort them out. In our case we either voice our displeasure immediately, this we find is by far the best route and the more you do it the easier it becomes, or shut up and accept that everyone has their own foibles. I am painfully aware that I'm

not one of the easiest of people to get along with.

The sun rises higher and the temperature increases. We just love it and start taking photographs. One here! We stop. Go around the bend and it is even more magnificent. Stop! Again! We lose more and more time until we know we will not make the Circle today.

A roadside Cafe' calls us back to reality and another of those fresh cream (*expensive*) coffee's trickle into our throats. Liz is in a reminiscing mood. "Do you remember when you were let out of school early in the winter, got home unexpectedly and your mum sat you in front of the fire with a mug of hot Ovaltine and one of those scrummy blackberry and apple pies? Those ones which spread all over your face and she had to wipe your face with a dishcloth before you switched on the radio and listened to 'Listen with Mother?" *Steady on Liz!* We talk about our respective childhood's, finish the coffee and scoot off, dawdling and stopping to take yet more stunning photographs. So marches on a slow, enjoyable day.

This is our present to ourselves after the horrors of yesterday, although we learnt a lot then it is not something we would like to repeat on **too** many occasions. We are dry! It is not possible to communicate what those words mean to us. When you are freezing cold and soaked through your limits of humour and tolerance are tested. The nearest person is can all too easily be the focus of your anger. We watch out for it!

The gearbox indicator is missing, nothing major. The horn doesn't work, no problem. The lights are on the blink, so what? Who cares.

*Watch it Ted things are getting **too** laid back now!*

Through Mosjoen, Hatten, Korgen the road winds Northward till we round a right hand bend and come across one of the most beautiful sights of the trip. Part of the Nordrana fiord system is directly in front of us. Not a breath of wind stirs the surface and 6 miles of road, mountains, forest and the most enormous blue sky are perfectly mirrored in the still water.

We decide to stop and enjoy the remains of the day. I find a sheltered knoll by the side of the fiord. Erect the tent and set to fixing the bike for tomorrow's ride. Liz slowly cooks the dinner. Beef stew, potatoes, peas and

carrots. Coffee and Norwegian cream cake to follow. We laze around. I wash up as Liz decides to have another go at fishing, we have heard fish rising to the early evening flies. I finish drying the plates, have another cup of coffee. Luxuriating in the early stop as I lie on my sleeping bag gazing upwards to watch the interplay of colours. From light to dark-blue. From dark-blue to wisps of yellow and orange. The sun lowers in a blaze of scarlet and red, still no wind as I go and see how Liz is getting on.

It takes a good half hour to find her tucked away on the shore looking intently at her float. Not a breath of wind as I sit and listen to the calls of the divers and the 'plop' of the rising, jumping fish.

Liz moves, sees me there and says, "Look behind you!" I turn as a 2lb Rainbow trout flicks it's tail at me. "Caught it a couple of minutes ago!" I ask what she intends to do with it, "It's for your breakfast!"

How sweet! "Do you know how to gut it?" Liz doesn't. Neither do I. So with Liz's agreement I decide to put it back in the water. I gently lift the weak fish. Hold it upright in the water. Move it forward to open it's gills and, with a quick flick of the tail, it is free and away.

Just like us.



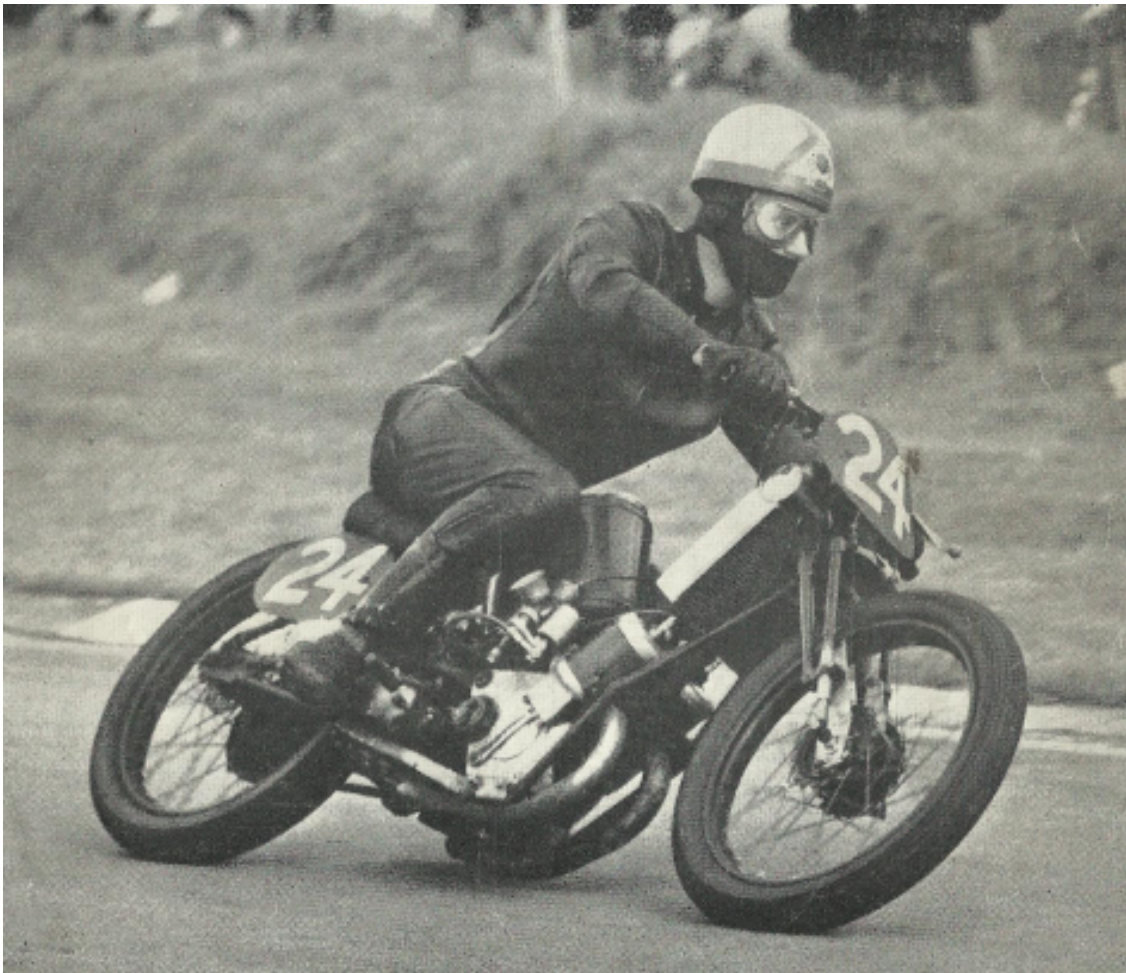
Ted Parkin

"Vincent to the North" Copyright EJP 1995

The evolution of a Scott

Many years ago I was spectating at Cadwell Park. I must have been in my late teens.. At that time the VMCC were racing vintage bikes. Many of them in fact.. Grids were full of Velo's Triumphs BSA's Etc Etc..

Among them, and I have to admit almost hidden away, was a very diminutive Scott. It really didn't look anything and most of us smirked , as you do at that age, and carried on looking at the "real bikes"..



Chris Williams on the Clive Wye Scott

So, the racing starts and from the mid pack emerges this little moped trailing a cloud of blue smoke..Out of the haze emerged the rest of the field and we settled down to see the super tuned Velo's etc trash the Nortons and Triumphs

The moped was third by the time the pack rounded Barn corner and was second as they flashed past the finishing line..

This was only the third lap of course and the rider proceeded to thrash everything in sight to walk away with the race!!

I had just witnessed Chris Williams on the Clive Waye Scott.. A revelation!!

But I was a “real” motorcyclist (*we were not “bikers” then by the way*) we wore Trialsmasters for what is now called “cred”.. These things were grubby oily filthy and smelly.. Well who cared.. Not us mate! We were hated by everyone anyway so what!! *I’m starting to sound like some young acquaintances of mine!!*

Anyway. I took some pics of the vintage bikes and even a few of the Scotts, never thinking I would be bothered with two strokes! And sped my merry way back home..

In the fullness of time.. (*See Vincent to the North in the Scott newsletter*) I was rather intrigued with these anachronistic things and eventually was invited to drop in at Stanford Hall (*See Scotland 1 and 2*)..

By now I was pretty well interested and a mere **8 years** later bought a 29 500 short stroke Flyer from Ian Young, riding it from Oxford to Hopeman Moray Scotland..

However, I digress. As a sidecar fan I had always had a hankering to race and indeed had raced my Vincent outfit at Cadwell Park on occasion. I later transferred to F2 then eventually F1 sidecars.. We had a ball and enjoyed it immensely.. However at £500 quid a weekend it was eating up the cash at a prodigious rate. So after some years the outfits were sold and thoughts slowly turned to building a Chris Williams/Clive Waye replica.. The basis for this was an engine and gearbox via Gordon Colhoun of Moto Vincent fame.

The frame and ancillaries came from Hawaii, Maui to be exact, as the bits of one of the “rare as hen’s teeth” speedway bikes.. The idea was to build a lightweight solo and do a bit of vintage racing. It needed modifying of course. The ground clearance was almost not existent and the fork rake was ridiculous! However **Parkin Engineering** was well equipped with a most useful tool in the shape of the savage teeth of “Mr Angle Grinder”” I was rather adept at its use and proceeded to cut up the frame to achieve my bike!!

Well! dear reader, you may pause here to inhale with shock and dismay at the wanton vandalism shown!!

In the fullness of time a solo emerged from the workshop in some sort of reasonable state. At around this time Roger Moss had mooted the idea of The Klausen Rennen in

Switzerland.. Now, my late fiancée' Pam was quite keen to have a go at this. so we set to work constructing a sidecar, The idea was to enable us both to experience the trials and tribulations of the event.. The sidecar worked well and did its job of holding the lightweight frame together, burdened as it was with 2 people .. We were not going to win any races of course but we were going to partake in the event



Who said a Scott never won a TT Replica!!

IT RAINED. LOTS

Afterwards , on arrival back home I decided that what we really needed was a better engine to go in the bike so commissioned Roger Moss to build a very special 633cc race engine for me. Meanwhile using the modified outfit in vintage racing in Scotland.. Great fun but again quite slow.



Initial thoughts!!



The Klausen Scott at East Fortune.

I began collecting various bits and pieces to build a complete new bike using all the info and Scott bits I had accumulated.. Dowty forks, 50's frame etc..

All this eventually resulted in the photograph below and we even did a few road tests borrowing Rachel King as my passenger..

Ted and Rachel testing. Note the stainless steel sink!!



However thing did not turn out as one would wish as by now my racing licence had

expired and as I had not raced for 2 years new rules came into force requiring me to start right at the bottom of the pile as a novice, red waistcoat and all. This after I had been a National Licence holder! However the rules are the rules so there I was with a good outfit but nowhere to race it!



Plan B... Scrap that idea and put the new engine into another solo.. Hence the MGP (*Moss, Gander, Parkin*) Scott!!



Full Circle!!

Ted Parkin

Advice to an old friend

Roger C has difficulty starting his Late 20's Three Speed Super and told me some details of the engine, which included his comment that it vibrates badly.

Dear Roger C. As regards your engine

My first concern is about the vibration, which would indicate some significant problem. It is impossible to predict exactly what is causing this without a strip and examine.

The first candidate would be cranks not secure in the flywheel, and if this were to be the cause, then it is better not to run the engine until this aspect is investigated. Crank looseness will quickly damage the integrity of the tapers in the mild steel flywheel. As the engine, as originally designed, relies on the truth of the cranks, as the glands must serve two masters i.e. crank stem and gland face, then any loss of axial integrity can soon compromise efficiency of gland sealing which affects starting and low speed running.

To some degree this original design limitation has a deleterious effect on the ideal running of at least 50% of remaining Scotts and was the reason why I re designed the end float control and separated out the sealing by using a modern synthetic seal. The oil control is by a small non return valve sitting under the brass oil feed elbow. By this means I have eliminated one component that must serve two masters and achieved it by just changing components without any alterations to other existing components. Of course, I do understand that this is not as original, but it is all internal and my emphasis is on enabling elderly engines that have some degree of loss of alignment integrity, to function efficiently.

An aspect that affects us all, as we get older, is loss of physical strength and as this diminishes, then the engine and its ancillaries must increasingly be at a higher order of efficiency in order for us to cope with them.

The late 1920's Scott flywheel had been progressively reduced by engineers who followed Alfred Scott departure from the company in 1917. It seems that these engineers had an imperfect understanding of the importance of flywheel mass. The Scott engine is not a balanced engine, it is only a Damped engine which utilises the resistance to change of attitude by a spinning flywheel. Anyone who, as a child, had a Gyroscope, will appreciate this effect.

When I am building an engine, I almost always hope that a customer will agree to have a weight ring added to the flywheel. This definitely, not only helps starting, but

also results in a much smoother engine with less snatch and chain thrash.

Next for us oldsters is the spark we can get from a slowly rotating mag. As the voltage required to jump a gap increases dramatically as the gap is increased, then I suggest you reduce the spark plug gap to 0.010". This will require much less voltage to fire and unless you are intending to race, which I do understand you are not, then you will not notice any reduction in engine efficiency. The coil ignition system can cope better with low speed cranking.

I think it is unwise to economise on spark plugs and for long series detachable head engines, I use NGK Iridium point BPR5EIX plugs. Unfortunately the only near equivalent in 18mm is the M18 spark plug made for Bugatti's and available from the Green Spark Plug Company. For this information I am indebted to Brian Marshall.

There is another possibility that is rattling around in my head. Many years ago I obtained a Lucas rotating magnet magneto which had been made for agricultural engines. The design was very reliable, and for its original use was fitted with an impulse device, that gave it a flick at the firing position, so that a fine spark was produced at very slow rotational speed. The impulse start device, as I remember, had a centrifugal device that took it out of operation when the engine fired and speed increased. This magneto had four output leads, so I removed the impulse starter and just put leads 1&3 to one plug and 2&4 to the other. It worked fine and my brother still has the bike.

To conclude the tale, as I understand it, this magneto proved so reliable that Lucas made a single cylinder version (SR) without the impulse starter for the Manx Norton as a rotating magnet magneto will always be more reliable than a rotating armature type. So I suggest you have a look round the Tractor Shows and see if you can pick up such a mag.

It goes without saying that the carb is in good condition, especially the needle and needle valve. These are often overlooked and the Scott with its inclined carb is more prone to wear in these items than other machines. The replacements are cheap and quickly fitted.

The last thing I wish to do is to insult anybody's intelligence, but I would be remiss if I omitted comments that might help on that score. Do not leave old petrol in the tank. It seems that the second rate brew that is sold nowadays, does deteriorate, so get some fresh fuel.

To try and leave the bike after a ride, in the best possible condition for an easy restart, I recommend that when you get home, you put the gearbox in neutral and with the engine at a fast tickover, you turn off fuel and oil taps. Keep the engine running until it stops for lack of fuel. You will notice that the revs rise just before the engine stops as it produces more power when running lean, but in chasing the benefits of this, many who rode two stroke racers in past years experienced seizures. Always run a bit rich on a road bike !

You will now have used almost all the fuel in the still warm float chamber, which would otherwise evaporate off the lighter fractions and leave an unhelpfully thick mix

to try and start the engine with next time.

If the bike has been standing over a week, your first job is to drain the wells on to clean tissue, so you can be sure there are no metallic debris that might need investigation. The "Gloop" that migrates down into the wells is quite thick after the lighter fractions have evaporated, so when a rod comes round and lashes it "Upstairs", this will certainly reduce the chances of getting the engine to fire.

The next suggestion is that before you are ready to try starting the engine, open the throttle and spray a burst of WDS 40 down the carb for about 2 seconds.

Turn on the fuel tap but not the oil tap and just let the float chamber fill.

Give the tickler a bare half second depression. The last thing you need is any flooding, unless, of course, it is very cold, or you have significant wear problems in your engine.

Only switch the oil tap on after the engine has run for a couple of minutes and of preference, switch it off when you are within a quarter of a mile from home on your return.

Now place a mat near the bike to save your knees and repeat "Our Father etc"

I do hope that these opinions are of some help.

It is usual that a bike will be easier to start once it has been started and run a distance.

In this case it might be worth considering buying a simple roller starter to help with the initial start. If you are going on a run and wish to stop for a period not much more than 90 minutes, then to give you the best chance of starting it again, I recommend the following.

Stop the bike with engine running. Engage a medium gear, apply brakes and start to feed in the clutch and open up the throttle as the clutch pulls the revs down. You stall the engine against a partially open throttle and thus the engine stops with gas in it, rather than empty.

Roger C told me that his pistons had 1/8" wide ring grooves, which suggests old pistons that may not be in optimum condition. I am not convinced that putting two 1/16 rings in an 1/8" groove will give optimum results, as they could tend to lock each other. For my racer engine, I use only one 1/16" ring and the bikes starts really well and is certainly no impediment to performance. It might need less effort to crank over and I certainly experience less wear, as the conventional second and perhaps third ring do tend to sweep the bore clean of oil and thus leave the top ring that endures the greatest temperatures and pressures with less lubrication than is ideal. It is for this reason that modern production engines often use a chrome faced top ring to best endure these hostile conditions.

If I were to build an engine for an elderly person to whom starting the bike is a difficulty, I would definitely build an engine with single ring pistons.

I do understand that many owners prefer an engine exactly as it was made. I have a 1911 engine in for some new pistons and a rebuild, but the inlet ports are dire and

could so easily be improved and compensate for the bias caused by the LH mounted carb. At 1911, I can understand it being regarded as a historic artefact to be left as near original as possible. Perhaps I might be considered a renegade to say “Warts and all”, but it would be a tragedy if in the century and more that has elapsed, we had not learned a little about the strengths and weaknesses of what was originally a truly ground breaking adaptation of the 1892 Joseph Day designed gas engine with the side transfer upgrade by Frederick Cock in 1893

Roger C, you are 80 and I am only 76, but I tell you honestly, that there comes a time when most of us will find it very difficult to cope with a bike, no matter how much we love it. We can only hope to find some younger custodian and continue to be involved by becoming a mentor to a new owner.

For me, the answer is a JZR Trike, that will not fall over and to start it, I push a button.

Life is a precious gift and we all try to savour every day

Kindest Regards

Roger Moss

Sprinting the Scott..



The Scott was fitted out for a flying kilo speed event. Unfortunately I had modified the cylinder head obviously incorrectly. This is the way with engine development and afterwards we had the engine on a dyno and it only made 30 bhp. It was timed and ticketed at 114.5 mph and so is the worlds fastest Scott by a margin. The next time on the dyno gave 41.9 bhp which would by calculation propel it to 137 mph. With recent improvements I estimate we have 44 bhp which might make 140 mph To be truthful, it is a pretty scary experience, wondering if the upward and downward forces are favourable or if you might be about to take off.

The objective originally was to exceed the 126 MPH of a Vincent Rapide. The fairing is taken from the George Brown Nero fairing which was made unofficially on the night shift at the Dehaviland aircraft plant and was even tested in their wind tunnel. In the engineering trade, we used to call such private jobs “foreigners”



The fairing with all the adaptations was made by a young engineer from Japan named Daiji Ikarashi who asked if he could work with me to learn some of the secrets of rebuilding Scott engines.



Daiji was the most meticulous engineer I have ever met and the job was never finished until it was as perfect as a work of art. We all liked Daiji very much, but I realised that although I try to make things to a good and reliable standard, I must be constantly aware of the need to keep the cost to the customer within bearable limits. I realised that I could not afford to pay Daiji fairly for his hours, as my customers would only pay for a working engine to an agreed specification, but not a work of art. A genuine lovely man who I wish I could have helped more.

Roger Moss

