



WE'RE ALL HERE BECAUSE WE'RE NOT ALL THERE



Norton Colorado

Newsletter

www.nortoncolorado.org

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Here's a suggestion from Peter Allen for things you can do with your Norton now that the weather's nice and things are opening up again. All you need is a project (or a destination). Any other ideas? Maybe a club ride? The calendar is wide open.

Upcoming Events

Woo Hoo!!!

Looks like we are restarting our social lives finally.

Eric and Suzy are hosting their BBQ, Dave Sheesley wants to have his 4th of July ride and brunch, Sam, Charley and Steve are planning on having the 4 Corners Rendezvous, The Riverside Ride is on, I'm ready to lead the Plains Ride in October and much more.

There's more information inside. Looking forward to seeing everyone again.

There's plenty of open time if anyone would like to host a gathering or lead a ride. Maybe something new??

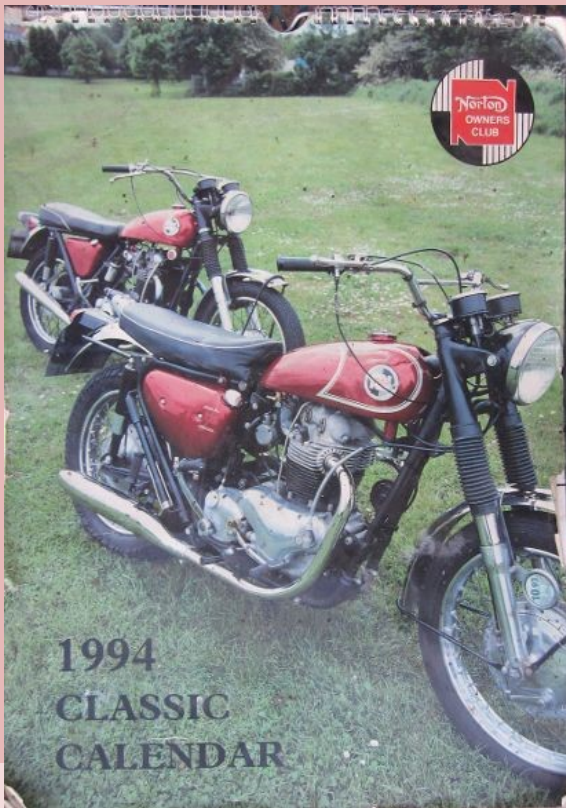
Look for club emails for more details about these gatherings.

From Jesse Carraway

P-11 Heaven

At the time this calendar was out I was in the process of "un-chopperizing" a P-11. I learned that the engine spacer thickness and placement was crucial and that the workshop manual/parts list were pretty worthless in showing what was correct.

Since this was pre-internet, there were not the resources we have today. As I was going to be touring the UK, I thought I would try to look up Mr. Morin and HyCam Engineering. Again, being pre-net, I could not find a good phone number much less email him. I had a 3 day pass that allowed unlimited tube and train use for a very reasonable amount. So having only an address, I headed out on the tubes to the outskirts of London where I caught a train to his town. His address was within easy walking distance from the train depot. I found his home and knocked on the door...unannounced or expected of course.



I asked the man who answered if he was knowledgeable about Norton motorcycles. He replied yes but he was also a veterinarian and dealing with an injured cat. He said if I could wait a bit that we could chat. Shortly after he let me in where I saw the original silver framed P-11 prototype in his living room...obviously a single guy. He had all the original factory blueprints as well as new parts marked and well organized. It was P-11 heaven.

He turned out to be a very nice and helpful gentleman and I ended up spending a couple of hours with the "Yoda" of P-11s next day, on the Birmingham and the British Motorcycle Museum...luckily in the "pre fire" days.

I purchased a key machine along with samples of all key numbers for Norton and other British bikes. I can now duplicate keys, cut new ones from the key numbers, or worst case, if someone brings the lock to me, they can try my masters until they find the one that fits and I can then make a duplicate. Even though the guys in the club are generally honorable, under no circumstances will I loan out my master key set. Way too valuable to me.

Editor's note: You'll need to zoom to be able to read this.

"THE ATLAS HYBRIDS"

BY PAUL G. MORIN

"When Nortons moved to Plumstead, they had a few Atlas engines left over so they stuck them in Matchless frames".

Comment from 'Knowledgeable' spectator at a concours event telling his audience all about a G.15 C.S.R. on display.

They must have had a few more left over than was realised as over seven thousand 'Atlas hybrids' were produced at Plumstead between late '63 and late '68. This period of Norton/Matchless production is probably the most confusing five years in the whole history of Norton and AMC. The main reason for this was the number of variants produced from basically two types of machines i.e. the G.15 series and P.11 series, built next to the 'Featherbed' Atlas at the same time.

Also nearly all the machines bore behind designation numbers and letters instead of names as was the habit of A.M.C. Most classic motorcycle enthusiasts could probably describe a Norton Atlas quite well, but ask them to describe a Norton G.15 C.S.R. and they may find this a little more difficult. Let us attempt to unravel a few small mysteries that surround these machines, but first a bit of history, so please pay attention as I will be asking questions later!

Between 1958 and 1960, Norton produced a small number of USA specification scramblers or desert racers. These used 777 type frames, the 600cc Nomad (approx 250) N.15 ('58), P.15 ('59) and R.15 ('60) and 500cc Nomad (approx 40) N. P and R.12 C.S. In 1958 Matchless produced the G.11 C.S. 600cc twin then later the G.12 C.S. 650cc twin, scrambles versions of their C.S.R. road machines. By 1961 the G.12 C.S. was the only scrambler of the aforementioned that was still in production, but it was proving to be unreliable despite of or because of its three mainbearing crankshaft. It was also down on power output in comparison with the Triumph Bonneville T120E scrambler.

It was therefore decided to increase the capacity of the engine to 750cc A.M.C. produced 200 'touring models' as the forerunners to the intended scramblers. These were designated the G.15/45 models (G.15 MK1). However they proved to be even more fragile than the 650cc version when ridden hard, so any thoughts of the scrambler variant were put aside. Frustrating to say the least for A.M.C. who knew there was a huge market in USA for powerful desert-racers, to compete in events often 100, 200, 500 and even 1,000 miles in length.

Meanwhile at Bracebridge St, the Atlas was proving itself after some minor teething troubles, such as the engines blowing up (just as its namesake, the Atlas Agneta rocket had done in a few years earlier). However this was quickly corrected and the engine was now fast proving to be reliable, as was the rocket. Back at A.M.C., things were getting worse. Their top of the range road model the G.12 C.S.R. started breaking cranks shafts with frightening regularity, as well as cranks shafts and followers wearing out prematurely. This was certainly not in keeping with the very handsome and sporty lines of the machine.

So we now have this strange situation whereby the beautifully engineered AMC 650cc and 750cc engines were proving to be unreliable when worked hard, and yet their subsidiary company, Norton Motors' 750cc Atlas engines, although a little crude were now reliable and also producing more power. How embarrassing. So what happened next, 'Nortons' desperately needed a new factory and what is more they had the money to purchase it. They had already inspected it. They just required the confirmation to proceed from their parent company.

A.M.C. did not give this. Instead they ordered Norton to send them the 'factory money', closed Bracebridge St down and moved production of all models to Plumstead. It would be a little naive to think that the two main points in this series of events i.e. the troublesome engines at A.M.C. and the moving of Norton production to Plumstead were unrelated. However it must be remembered that A.M.C. were now fighting for survival. The scramble frame was a proven frame for scrambling, the 'Featherbed' would break below the headstock) but no reliable engine to power it - then all these Atlas engines and 'Roadholder' forks and wheels mysteriously appeared at Plumstead!!

PART I

1963-1967 THE G.15 SERIES 107388-124371

TOTAL APPROX 5000

In November 1963 a batch of 200 Norton 750 hybrids were leaving the Plumstead story en route to the American distributor Berliner. When they arrived at their destination, it would be the first delivery of the new 1964 Norton Atlas Scramblers and were therefore the most powerful production desert-racers ever to be produced at that time. The prototype had already been thoroughly tested on the rough at Hawkstone Park by C.Os Horsfield. This was the start of a four-year production run for the 'Atlas' powered G.15 Series.

1964 The Atlas Scramblers 107388 - 110774 G.15

C.S.N/ G.15 C.S./M

Approx 1000 built

All these machines used a new frame similar to the G.12 C.S. duplex type with bolt-on rear subframe but were fitted with a redesigned malleable-steel headstock machined to accept Norton forks and front wheel. The robust swinging-arm was of the Matchless type, but also redesigned to accept a Norton rear wheel.

The arm pivoted on a hardened steel hollow spindle, the outside diameter of which ran in phosphor-bronze 'oilite' bushes pressed into large lugs on each side of the front of the fork. This spindle was supported by its centre portion in a sturdy single cast lug which was pinned and brazed to the vertical tube forming the rear section of the main frame, the spindle being locked in position by way of a cotter. The front forks used stanchions which were 2 inches longer than the Featherbed version and had special 'Teledraulic' type two-way damping and external springs hidden by steel cover tubes lit preference to rubber gaiters, along with standard 'Roadholder' alloy sliders. The forward engine mounting lugs were positioned to accept the latest twin-carburettor version of the Atlas engine. The frame/engine numbers followed the Norton system (as did all subsequent hybrids).

The left side crankcase half was machined to take the A.M.C. cast alloy primary chaincase and the gearbox shell was of the A.J.S./Matchless type with the lugs in a different position to the featherbed shell. The scrambles petrol tank, latest type pear-shaped oil tank and battery were all Matchless items and were painted in the A.M.C. Cardinal Red of the 1961/62 G.12 Series machines. (Note to restorers: apart from colour options offered by the distributor, this purple-red was the stock finish and only two prototypes were in silver). The petrol tank used Norton transfers on the sides and had a single black coach-line outlined in white. A straight through exhaust system with slightly upswep ends (no silencers) was employed.

Contemporary photographs of a silver prototype sometimes showed the machine with the large A.M.C. silencers. The factory used that same machine to test components for the intended touring model. The mudguards were in chrome and had a centre rib which were similar to those used on the G.15/45 all Matchless Model. This first batch also used non-folding footrests and the Lucas K2FC competition magneto. Subsequent batches had folding footrests and a standard K2F mag. The reason for the change of magneto apart from cost was that it was very difficult to undo the pick-up holder screws due to the close proximity of the gearbox. The machines came complete with 12 volt lighting system.

As all subsequent G.15 series machines were based on the Atlas Scrambler we will now carry out an in-depth investigation into the production run and problems encountered on the first machines. It was not long before Mike Patrick the desert-racing star was notching up wins on one of these 4201b models. By July 1964 a total of 600 Norton Atlas Scramblers designed G.15 C.S.N in parts ordering books and 400 Matchless 750 Sports Scramblers designed (and engine stamped) G.15 C.S.M had been produced. The Matchless version was finished in 'Candy Apple Red' (chromatic) and the petrol tank was silver with black stripes. The 1964 models had diamond-shaped badges, the engine numbers commencing at 108638 with the last batches starting to use rubber gaiters on the forks.

All these first machines went to Berliner, the main distributor for the USA. There must have been quite a hectic rush at the factory to get the scramblers built, because there were a few 'oversights' on the first batches. One was that it was impossible to remove the cylinder head in situ because even when the exhaust rocker spindles were extracted there still was not enough clearance between the top frame tube, to tilt the head back. The other was that the rods had to be removed, the head studs were about 1/8" too long necessitating lowering of the engine. These studs were shortened on all subsequent Atlas engines. Another problem was in the adjusting of the magneto chain or taking off the magneto. Once again because of the close proximity

imity of the gearbox to the engine, the nut on the bottom magneto fixing stud was inaccessible. This of course was not a problem on the Featherbed because of the gearbox being half way away from the engine. The factory corrected this with a modification to the right-side crankcase-half using a nut and bolt arrangement for the bottom magneto fixing point so that this could now be loosened from inside the timing cover. All subsequent Atlas engines received this. Rushed production also meant that even though the new wider forks were used, the steering anti-theft locks were not available, neither was the new magnetic tachometer. Therefore the first batch went out without the locks and with magnetic speedometers and chromometric tachometers.

Improvements to the next batches were a tighter turning circle achieved by machining more material from the crown 'lock stops' and also longer centre-stand feet because it was soon discovered that with scrambles tyres fitted, when the machine was on the stand with the engine ticking over, the bike would creep along on its own and disappear down the end of the road. A most amazing omission was that the inner primary chaincase was only secured at the front. This was by way of the three cheese-headed screws, but the rear was unsupported. This was later corrected by including another stud which secured the centre area to the left engine plate. Even so, these hicups on the first batch, which were quickly rectified, didn't appear to have dampened enthusiasm for the 'export only' Atlas Scramblers and going by contemporary tests of the machines, they were very well received, probably because most of these errors were in servicing or 'surplus equipment' rather than actual performance in the desert.

1965-1967 N.15 C.S./G.15 C.S. 111926 - 124371

Approx 2,500 Built

(1965/66). These later machines were closely based on the Atlas Scramblers but now had modified front fork action, rubber gaiters, and stronger head-steady. The oil tank was 'set-in' an extra 1/2" at the front to suit the slimmer spacers which was also used on the earlier G.12 C.S.R. models. The Norton was now named the N.15 C.S. and the engine number was preceded by this designation. The Matchless was named and engine-stamped 'G.15 C.S.' which was the identical stamping for early Norton Atlas Scramblers, ensuring many for later restorers. Both machines were now identical in 'Candy Apple Red' plastic tank badges being different although the Matchless now used the new 'winged' items. Some of the smaller batches were finished in non-chromatic blue or chromatic green.

Another cosmetic re-vamp included less bulky mudguards along the centre rib, the new 'side-bulge badge area' petrol tank and a more modern looking seat without piping but with a plastic-chrome bottom edging. The forks now had lateral springs but by this time the machine was a 'Street Scrambler' and had long lost its 'Atlas Scrambler' tag, with both versions now using Norton silencers.

So the two Norton Atlas Scramblers were only the six hundred up to July 1964 and finished in Cardinal red. The first two-hundred batch which had engine numbers stamped G.15 C.S. 107388 to 107588 would presumably be the most collectable batch. As all subsequent Atlas hybrids had the 750 cc engine, the frame numbers stamped in line down the left side of the headstock but early Atlas Scramblers had each individual number stamped sideways but still in a vertical line, i.e. 107402 early stamping or 107403 later stamping.

To understand this more clearly simply turn this page (not the bike) clockwise so that the right side is at the bottom and then view these printed numbers.

1964 -1967 G.15MK1/G.15P/33 109038-123570

Approx 1000 Built

G.15 MKII At the same time when the original Atlas Scramblers were being produced, a touring model was planned for mid-1964. These were the 1964 models. They had a four gallon Matchless tank usually in black with a coach-line and pin-stripe in a zig-zag flash, and large 'knee-knocker' cast badges (which were replaced in 1965 with the 'winged' plastic items), large deeply-valved chrome mudguards, conventional exhaust pipes with the late A.M.C. silencers and a more traditionally European styled. The machine used the same frame as the scrambler models but the front forks although still extended two inches had Roadholder damping and internal springs. It was an excellent side machine. The designation was G.15 MKII to differentiate it from the discontinued all Matchless G.15/45 touring. Confusion was still to occur in the future for restorers however, because early batches were crankcase stamped G.15 C.S. XXXXXX M2. The C.S. stamping was dropped in 1965 and later that year the M2 stamping was also discontinued. The MKII continued production until 1967 with some export machines having a chrome-sided petrol tank finished in Candy-Apple Red.

G.15P This was a single seat version of the MKII produced in small numbers during 1964 presumably for the forces who used the machine. It was a touring machine, the machine was to be an 'export' or 'home' model and whether it was to be designated a Norton or Matchless i.e. G.15P/N or G.15P/M. The guards therefore could be either painted or chrome, and could be the G.15 MKII type or the lighter E.52 MKII type. Note to restorers. In 1964 parts for the G.15 MKII were listed under G.15P.

33 From 1965 - 1967 an AJS version was produced named the 'Model 33'. It was finished in either black or blue (chromatic). The petrol tank had a gold zig-zag flash and the motifs were the large cast items changing to the smaller plastic 'diamond' shaped badges for 1966. Over 50 machines were produced. Engine number stamped 33.

1965 -1967 G.15 C.S.R/33 C.S.R. 112476 - 123465

Approx 500 'Cafe-Racer' Types + 100 Others

In November 1964 at the Earls Court Show appeared another variant. This prototype machine was the forerunner for the flagships of all Atlas powered hybrids. It was a sports model in 'cafe-racer' trim with the designation G.15 C.S.R. An AJS version in blue (chromatic) was to be the 33 CSR and in the USA the distributor Berliner sometimes would change the Matchless badges to Norton calling the machine the 'Norton S/S 750'.

The 1965 production models had swept back exhaust pipes - (the only stock motor-cycle from any manufacturer to offer these as standard equipment) with the large Matchless silencers. Only the shop prototype 'cafe-racer' had Norton silencers.

A large 4 gallon chrome-sided petrol tank in 'Candy Apple Red' was fitted which was possibly the most pleasing tank ever produced in the mid-sixties. (From 1966 the G.15 MK1 I also used this tank on export machines). The AJS 33 C.S.R. was finished in blue (chromatic), but only about 50 of these were produced. The racing image continued with 12.9" rear suspension units (the C.S. used 13.4") with top covers chrome and bottom covers removed exposing the plated reverse-coil springs, rear-set footrest, short rear-brake pedal, rear-facing gear change lever with reverse camplate inside the gear-box still allowing normal selection, polished dual mudguards and a set of A.M.C. sports seat all ensuring the machine looked capable of exceeding the '60s.

Fast it was with one electronically-time highest one-way speed of 115 mph (on 7.6 to 1 pistons) in a contemporary road-test of what now appears to be one of the most collectable sports machines ever produced. The reason for this was that the 18" wheels were changed to 19" thus slightly increasing the gearing as both sizes used 3.50 rear tyres) until 1967. Last cafe-racer 120511. After this the 33 C.S.R. was dropped and the Matchless lost its 'cafe-racer' status, (a sure indication that the 'Rocker' engine had passed) and coil/Centronics models with standard footrests and normal exhaust-pipes using Norton silencers converted the machine into a porttouruse (approx 50 produced). The 'cafe-racer' C.S.R. machines did not use Norton silencers because of clearance problems with the positioning of the rear-set items.

However an unusual final batch in mid-1967 was produced. The large petrol tank was replaced with a 2 gallon scrambles item but with chrome sides, and with high 'ape-hanger' handlebars the C.S.R. capitulated as an American styled 'Street-Matchless'.

During this period the Matchless engined 650cc G.12 C.S.R. had finally been made more reliable by the fitting of a 'nodular' crankshaft, stellite tipped cam-followers and increased oil-pressure, but it came too late and they had lost the good name and status to the G.15 C.S.R. but rather interestingly from 1965 they also used Norton forks and wheels and were styled more as a tourer. Note to restorers - The frames used on these machines whilst looking identical to the G.15 frames of the same years, are however different in that the engine mounting lugs are positioned for the Matchless engines.

S' it now becomes more obvious why these hybrids were produced. The only true comparison between the 'Featherbed' models and the G.15 hybrids would be to put

a Norton Atlas next to a Matchless G.15 C.S.R. it would be a sensible question to ask why these two machines were produced at the same time. The answer may be 'badge allegiance' but I will try to compare the differences in actually using them from 'memorable' experiences gained at the time they were produced. The machines were a 1961 G.12 C.S.R. then a 1964 Norton Atlas ordered untuned (but with rear-set footrests, ace bars and 19" rear wheel with G.P. tyre) from Paul Dunstall and finally a 1967 G.15 C.S.R. Cafe-racer.

Bearing in mind the scrambler parenthood of the G.15 C.S.R. frame, it is quite amazing that it had any high-speed road-holding qualities at all. In fact properly set up it was very good, better than the G.12 C.S.R. and almost on a par with the 'Featherbed' at speed and on flat bends. (Ah! I hear you shout 'that's because it had 'Roadholder' forks'). However lower down the speed scale the Featherbed was more 'lickable' for roundabout 'sweeping' and more sure-footed in the wet. Both frame types are 'stretched' to the limit with the power of the Atlas engine as per Paul Dunstall had discovered and he subsequently used 'Low-boy' and then special frames for his Atlas engined 'Domiracer 750' machines.

On really quick bends the 'Feat'erbed' had a controlled 'drift' whilst the G.15 C.S.R. had a tendency for a slight rear-end weave. Vibration was similar but slightly less on the G.15 C.S.R. for some unknown reason but neither were excessive in this. The vibration (only at high revs) on the Matchless engined G.12 C.S.R. however was high-pitched, sonic and destructive, yet for normal use this machine was the least 'fussy' of the three, albeit with less power available.

Servicing was easier on the 'Feat'erbed' but the alloy chaincase on the C.S.R. was a better arrangement, but bearing in mind the machines were new, there were no oil leaks from the Noyfon chaincase gishier. The Matchless was more comfortable on long journeys or when carrying a pillion passenger but the Norton was more easy to manoeuvre in traffic conditions. The Atlas centre-stand foot-peg had to be raised to clear corners but even so the 'Feat'erbed' still would still ground' before the C.S.R. Exhaust notes were very 'healthy' but I must confess a preference - once to the deep 'burble' of the Matchless 650 engine.

Styling is more of a personal requirement. Perhaps the smooth lines of the Norton Atlas or the aggressive lines of the C.S.R. reflect the hidden personality of the owner. Should anyone own both an Atlas and a G.15 C.S.R. Hycam can now offer psychiatric help! Note - take care not to inter-change the rear-wheel spindle spacers of these two machines - they are a different length. Therefore it would appear that personal taste played (and still plays) a large part in the comparison of two of the fastest machines of that time.

A.M.C. employed 'Series production' during this period which meant that improvements, modifications and new styling would be introduced into the next batch of machines, instead of waiting for the traditional 'show' time, therefore there will be many instances of 'overlap', with intermediate models to the stated changes in this article. However the introduction of the six-start oil-pump gears, and the change from magneto and Monobloks to coils and Concentrics occurred at the same time on the G.15 series as on the 'Featherbed' Atlas.

The chromatic finishes referred to (e.g. Candy Apple Red) were achieved by applying the top colour over a silver base giving a translucent effect and thus the more coats applied - the deeper the shade. This sometimes caused 'shadowing' if the colour was not applied evenly and also caused variations in the shade from batch to batch.

Perhaps it would be in order here to compare the differences in performance with a standard Atlas engine fitted with Magneto and Monobloks and then Coil and Concentrics. There is no question to my mind that the Mag/monoblok set-up provides far more flat-out power reflecting in overall quicker performance but with a price to pay. Coil/Concentrics make for easier 'hot' starting, smoother performance, a more even tickover and far better fuel consumption. However, my own preference is for magneto and opposite Monobloks 389/689 because assuming the carb. bodies are kept clean, the introduction of the six-start oil pump, but causing all manner of problems, then you have a compromise with good performance and reasonable fuel consumption.

The early twin-carb Atlas engine with two 389 bodies, the right-hand one having a standard carburettor chopped-off to accept the second carburettor. The 1964 Atlas described had this arrangement and with the air-filter removed, the main facts recommended were 440 returning a consumption figure under hard riding of 35 MPG! But did it go! On several occasions under favourable conditions it pulled 6.800 RPM in top (discount clutch-slip) giving an average 117 MPH. The machine was also opposite Monobloks 389/689 should be about 360, returning about 50 MPG on average-riding, and for Concentrics the jets should be about 260; returning about 60 MPG.

And so by mid-1967 the G.15 series had come to an end. Many unsold machines were put into stock and later sold as 1968 models. A few were even registered in 1968, but the introduction of the 1968 Atlas did indicate that the series had overrun its time. But back to 1967, the hybrid builders at A.M.C. or by this time Norton-Villiers had not quite finished yet. With a flourish of activity they planned and produced another series of hybrids that were completely different from the previous machines but still used the Atlas engine for power and although production was short-lived, they were even more spectacular and caused just as much confusion to restorers many years later - the notorious P.11 series.

ADDENDUM

Highest-speeds attainable on standard gearing under favourable conditions but not sustainable.

M-magneto/monobloks	C-coils/concentrics	
Sprockets		ilear,t/rre
E.21-G.19 Norton Atlas	M 110 mph @ 6400 rpm	1,184.00
E.21-G.17 N15 C.S.G.15C.S.	M 100 mph @ 6400 rpm	1193.50
E.22-G.17 G.15 MKII	M 104 mph @ 6400 rpm	184.00
E.22-G.19 G.15 C.S.R.	M 115 mph @ 6400 rpm	183.50
E.22-G.19 G.15 C.S.R. (USA)	M 116 mph @ 6400 rpm	193.50
E.21-G.19 P.11	C 106 mph @ 6,000 rpm	193.50
	C 105 mph @ 6,200 rpm	184.00

These figures are based on electronically-timed speed tests. It should be remembered that these were stock twin-carb machines with gearing and riding positions as delivered. It is often not fully appreciated that gearing/riding position can alter the top speeds using the same engine by over ten miles per hour. As a general rule a machine later fitted with small-bore exhaust-pipes, low bars and rear-set footrests will increase the top speed quoted by approx. 3 mph (apart from the 0.15 C.S.R. Cafe Racer which had this set-up as standard equipment). A dolphin type fairing would give another 3 mph or a full dustbin 6 mph. Realistic short period top-speeds would be approx 10 mph less than the stated figures and long period top-speeds approx 20 mph less with comfortable cruising at approx 35 mph less. Maximum power is @ 6,400 rpm with maximum safe @ 6,800 rpm (not attainable in top gear on standard machines).

Cruising speeds should be just above or below the 4,500 rpm vibration peak. Atlas crankshafts should never be dynamically re-balanced if they are to be used for the road, but they already have an 80% balance factor and any further balancing will only shift the vibration period to a different range. If this period comes in at your chosen cruising speed, just alter the gearing. It is not recommended that P.11 series machines be converted to cafe-racing spec, and used as such. You will fall off and anyway there aren't enough cafes left to race to. Should much higher top-speeds than those quoted be claimed, then the machine either had clutch-slip whilst the tach. was being read or a tuned-up speedo meter was fitted. The fitting of 9 to 1 pistons alone will make the engine less tractable at low speeds, may increase mid-range acceleration, but also reduce top-speed. However, if you are further along the road, the machine that the non-standard top-speed can be held. Tappet clearances should be increased by 0.02" (.05mm). It is also recommended that a 'superblend' type main bearing be fitted to the drive-side. Should a 'superblend' also be fitted to the timing-side in place of the original type ball-race, crank crankshaft end-flot as per manual. Should a complete Commando engine be put into a featherbed or hybrid frame, the crankshaft must be changed to the Atlas balance factor.

Ignition/timing (Fully advanced)	7.6-1 (Concave Crown 32° BTDC 9-1 (Flat Crown) 28° BTDC
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"THE ATLAS HYBRIDS" PART 2

On the 30th June 1966 a hybrid Norton N.15 C.S. and a Matchless 500cc single G.85 C.S. Scrambler were being despatched from Plumstead for shipment along with many other machines of various types. This days consignment was part of a huge order numbering many hundreds of machines and also the first models of the only production run of 100 machines of the new G.85 C.S. (earlier machines were built to special order in the competition shop). Nearly all of this complete order was to be shipped via New York to Berlin's, New Jersey headquarters, but a few including that 0.85 C.S. and the N.15 C.S. were to go on via Los Angeles to the western distributor ZDS Motors of Glendale California, where Bob Blair would be waiting to exercise his skills in marrying up the N.15 C.S. engine and gearbox to the G.85 chassis. The result would be to produce a lighter, faster prototype desert-racer, culminating in a production run back at Plumstead of two thousand-five hundred machines.

The silver-painted G.85 C.S. duplex frame was made from Reynolds '531' chrome-molybdenum thin-walled lightweight tubing with sifbronze welded-on subframe, a single spine top tube, and malleable steel headstock. It was similar in design to the Rickman Metisse. The swinging arm was supported by gusset plates each side as on the 'Featherbed', and bearing on metalastic bushes also common to that frame. The front forks were the lighter type 'Teledraulic' scrambler unit with the small diameter stanchion tubes. The front wheel was the 1963 Matchless item, with slightly increased brake-lining area. The hub had the fins skimmed off. The rear wheel was an A.J.S./Matchless TR/G.50 road-racing type with the hub made of magnesium but was modified to accept heavy-duty spokes lacing an 18" WM3 rim to the conical hub. The two outer rear-brake fins were machined down to give clearance for the rear chain and the brake air vents were blanked off. It was a very purposeful looking machine but the 500cc single engine was not powerful enough

1967 -1968 THE P.11 SERIES '121007-129145 TOTAL APPROX 2500

In March 1967 the first production model P.11 121007 had rolled off the assembly line and was wheeled outside for photographing. It had collected stronger front forks with standard scramblers internals - (very unsuitable for the road) to the prototype, larger 3 gallon petrol tank with the round plastic Norton badges, neat little vestible silencers, and lights. However the G.50 rear hub had been replaced with the standard Matchless road type albeit with the fins skimmed off so that it paired with the front. The machine had alloy guards, the rear short guard supported by a loop at the rear. The loop was fixed into the end of the subframe top tube via alloy reducers. The front of this short guard was supported on tabs welded to a sturdy cross-bridge which was part of the subframe just behind the back of the seat. The black covered single seat also had a black glass-fibre base, (the identically shaped G.85 C.S. seat had a red base), which was formed on the underside to continue the mudguarding up to the oil tank, the rear of which also formed the forward section of mudguarding. Apart from the oil tank, this rear section was virtually identical to the G.85 C.S.

The magneto and monobloc carburetors on the prototype were lost to twin-coil/Vac-pacitor ignition and concentric carbs. The machine was equipped with speedometer and tachometer, sump guard in alloy, but without the sides that were on the prototype. There was no provision for a centre-stand. The petrol tank and alloy oil tank were painted in 'Candy Apple Red'. The frame was in black. The oil-tank had been reduced in width at the left end to make room for a battery. Weight of the machine was said to be 360 lb, this particular machine 121007 was being photographed without a battery cover. The prints were then taken to the publicity department where they were subjected to some very clever artwork. This was to be for the brochure and the artwork involved painting in a side cover on to the prints which showed a very pleasing wedge shaped form (similar to the Commando of the following year). The reason for this was that the battery stuck out at the rear so it was impossible to make a cover that would not also stick out. Thus the brochure side-cover was an optical-illusion. The production covers were more rounded and swept back at the rear-end. Notice to restorers - stop looking for that angular cover in the 'high pipe' P.11 brochure - it did not exist. Later batch Matchless P.11 machines were identical to Norton.

So what was wrong with the P.11? After all the prototype had been thoroughly tested in the desert. The truth was nothing at all apart from the now one-sided oil-tank splitting along its aluminium seams and fixing mountings. After all the central oil tank on the prototype didn't fail in testing. The problem here was that it was rubber mounted which was fine except that the clearances between the frame tubes were so tight that at high engine speeds, the tank vibrated against the tubes to one side and also when the machine landed heavily after flying over a sand-dune, the rider's back-side would press the fibre-glass seat on to the top of the oil-tank, administering more stress to the mountings. Another minor embarrassment was that somebody forgot to include a drain plug. Well the prototype didn't have one, so why should the production models! The aluminium tanks were strengthened and drain-plugs were included on the next batch. However the tanks still continued to fracture thus making the drain-plugs unnecessary.

Finally a steel tank was designed with rubber-mounted clamps and this solved the problem. As mentioned earlier the oil-tank was the only problem - as long as all ancillary parts were removed. If the machine was used hard, the headlamp, side cover and few other minor items would become loose and fly off into the desert. Contemporary road tests show that in America the P.11 where it was called the 'Chetah-45' because of its tremendous acceleration) was very highly rated and some testers were not at all concerned about how much lighter the machine felt after a rugged test. Of course it can be said that the machine was never intended to be jumped with all its ancillary equipment in place. After all it was fitted with coil/capacitor or ignition system so the machine could run without a battery. One of the most absurd statements made about the P.11 in this country (where wisely the machine was not available) was that handling of the P.11 was not to 'Featherbed standards'. We may presume that the same writer on testing a 'Norton Atlas' would have stated that in the desert the 'Featherbed' was not up to P.11 standards.

This first couple of batches used the 4CA points set-up which was not very reliable. The automatic advance/retard mechanism was also very fragile. It gave a very sharp advance curve which was good for racing but too harsh for the road. This caused excessive vibration which helped loosen off many parts as described earlier as well as engine/frame studs. Once again this was quickly corrected by using serrated spring washers on all the engine/frame mounts which bit into the alloy plates. Also a 'milder' auto advance unit was employed and later 6CA contact breakers introduced when the machine became the P.11A in mid 1967. There were about 500 'high pipe' P.11 machines produced when it was decided to cosmetically alter the machine into a street-scrambler rather than a desert racer.

The P.11A had a low level exhaust system that kicked tv quite sharply at the rear and was fitted with long tapered silencers with detachable endcaps and detachable baffles should the rider wish to enter a club event. The tank was usually in 'Candy Apple Red' but had now shrunk back to 2 gallons an used a 'Green Ball' Norton-Villiers transfer in the centre. The tank was not lined Some P.11A machines were finished in blue (non chromatic). The seat was as on a P.11 with a fibre-glass base which was moulded on the underside to continue the mudguarding up to the oil tank but was now long enough to carry a pillion passenger, but at the expense of the sturdy cross-bridge on the rear sub-frame being omitted. This necessitated a cross-strap on the rear mudguard loop on which to attach the guard. The rear light unit was now housed on an aluminium casting. Early models still used alloy mudguards but later models used chrome guards. The machine became the P.11A/Ranger at this time but now had a steel-based seat with plastic-chrome bottom edging. This seat required the use of a longer chrome rear mudguard as it was not formed to be part of the guard system as was the P.11 and P.11A. The petrol tank was now gold lined with Norton transfers. The 'Green Ball' was dropped. The handlebars of the P.11A and Ranger models had the cross-brace higher than the P.11 and G.15 machines.

Last model only 20 months after the launch of the series was the 'Ranger 750' - a name at last. This was the same as the P.11A Ranger except the hubs were not skimmed, Ranger 750 transfer on the oil tank and battery cover, stronger side-stand mounting brackets, front brake stop-light and pillion strap over the centre of the seat. The frame number on the P.11 series is on the left side of the malleable steel headstock as on the G.15 series, but on the G.85 it is on the right of the headstock. Probably the most complicated job on a P.11 is putting the engine/gearbox unit back into the frame and assembling the eleven spacers in the correct position. If this is not exactly right the engine will be out of line and the rear chain will foul. Also the prop-stand bracket will not abut against the L.H. engine plate and will swing round

causing the machine to fall. During its short production run the P.11 series used 3 variations of petrol tanks, 5 variations of oil tanks, 4 variations of side covers (all basically the same shape but with various recesses for clearance and different fixing points, 3 different prop-stands (the Americans like to start their machines on the side-stand) 3 different seats and 5 different rear mudguards (3 alloy 2 chrome).

In the interests of safety it should be noted that the high-pipe P.11 machines left the factory with scrambles front forks. For road use the main springs and damper tubes should be changed. Also buffer springs and collars fitted as on the P.11A from approx. 124370. However this still only gives a compromise and care should be exercised when negotiating fast bends. Another point of safety concerns the rear hub. There must be a small amount of play when the bearings are adjusted. The adjuster locknut must be super-tight and the speedometer gearbox regularly greased. If any of these points were ignored, the rear wheel will lock up possibly 'totalling' the machine complete with rider.

As mentioned earlier the oil-tank was a very tight fit in the frame. The later steel tanks were gas welded and sometimes with heat distortion they would not fit into the frame on the assembly line and were scrapped. The factory made new pressings with a raised seam to join the outside to the main tank and these were lip-welded and did not distort on cooling. The series was halted before they were used so these tanks were put into spares stock. By this time the Commando had been in production for several months and sales were extremely encouraging, therefore it was decided to cease production of the P.11 series to concentrate on increased orders for the machine with a better sale potential. And so that concluded another series which ruled the desert for a couple of years. The first Commandos used some parts from the G.15 series, many ideas from the P.11 series, engine developed from the Atlas, a frame designed by an outside engineer and was built in the old AMC factory by Matchless men - oh no - not another hybrid!

Paul G. Morin 1993

to be competitive in two-hundred to one thousand mile desert races. Although the Atlas Scrambler had been competitive at the time, its successor the N.15 C.S. was proving to be too heavy now in comparison with other manufacturer's scramblers and so Bob Blair envisaged the G.85 C.S./Atlas as the answer.

On receiving the machines he set about the engine change. The front frame engine lugs of the G.85 were re-positioned, the right-hand one had to be removed and re-sited upside down, dural main plates were cut and obviously after a few 'fittings' the engine, complete with gearbox, slotted snugly into the frame. The main chassis including the forks and wheels were untouched. The primary chaincase from the N.15 C.S. was modified to provide an extra support for the footrests which were non-folding. The N.15 C.S. petrol tank was fitted in place of the glass-fibre G.85 C.S. tank. Special parts made were a central 10 pt aluminium oil-tank, lightweight air filter body in aluminium, alloy head steady, alloy sumpguard tray and a pair of beautifully contoured high-level exhaust pipes.

A huge 'U' brace was made to strengthen the forks, an alloy rim was put on the front wheel for lightness in this area, and suddenly the machine was ready for testing by Mike Patrick and Tom Maxwell. It was sent out, crashed, bashed, repaired and sent out again and again, day after day, into the desert, until it was sure that they had got it right. Then the footrests were taken from the N.15 C.S. rolling chassis, the support arms were cut off leaving the folding peg assemblies which were welded on to steel braces, fitted, and then the whole machine was shipped back to Plumstead complete with Bob Blair to explain to the factory what was required in order to evaluate a production run. It went into the 'experimental dept' where it was stripped down and closely examined. John McLaren helped in this work.



thecoloradoconclave.com



<https://www.gentlemansride.com>

Dunstall 2-1-2 Exhaust for Norton Commando

by Frank Puckett

In the early 1970's, Paul Dunstall developed an exhaust system for the Norton Commando. It was called the "Norton Power Street Exhaust" and was developed in conjunction with Dr. Gordon Blair of Queens University in Belfast. Dr. Blair had a keen interest in motorcycles, and in addition to working with Dunstall, he also consulted on Yamaha racing engines in the 1970's. The mechanical engineering department at Queens headed by Dr. Blair also developed and raced motorcycles.



Dr. Blair used computer simulations of the exhaust pressure waves to develop the exhaust system and that is where it was determined the 2 into 1 into 2 pipe system would improve Commando performance. The system used the widely popular Dunstall Decibel silencers that he produced since about 1968. It is said that one year he produced 24,000 Decibel silencers, which have been copied ever since.

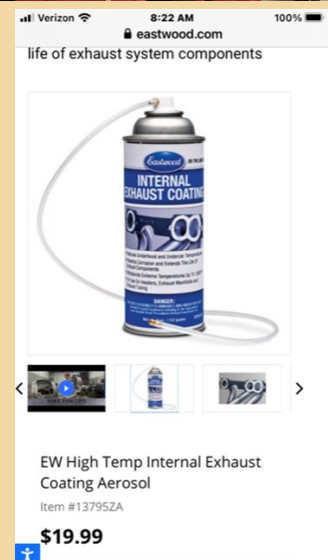
The Power Street Exhaust system certainly improved Commando performance as is seen in the catalog advertisement. The exhaust system had some problems that probably reduced its popularity. The single pipe under the engine meant that you could not use the standard Commando center stand. Dunstall developed a center stand that mounted forward on the engine cradle, but it was a compromise, lifting the front wheel off the ground. Counting the attachment to the head, the exhaust system had seven joints. In addition, it was supported only at the cylinder head at the front and at the silencer attachment at the rear, so I think keeping all the joints together was a problem. I had to repair the pipe under the engine from dents and scrapes, so this exhaust system was not good for going over curbs or speed bumps.

This Dunstall exhaust was on the Dunstall Commando that I got from Bob Ohman, and I decided to restore and use it. It has original Decibel silencers, and I built new stainless baffles for them. I copied the original rusty innards as closely as I could. I got as many dents out as I could, and fit up the system before sending it off for chrome at Salt Lake Chrome. They did a great job, and I painted the interior of the pipes and mufflers with Eastwood Internal Exhaust Coating. It is supposed to reduce heat transfer to the pipes. I am hoping it will help keep the pipes from bluing, but they do not make any claims on that.



I am using the Dunstall center stand, and fortunately you can still have a sidestand. I used all new heavy duty exhaust clamps, and I added a "hanger" in the center of the system to support the pipes. We will see how things hold together and whether this helps.

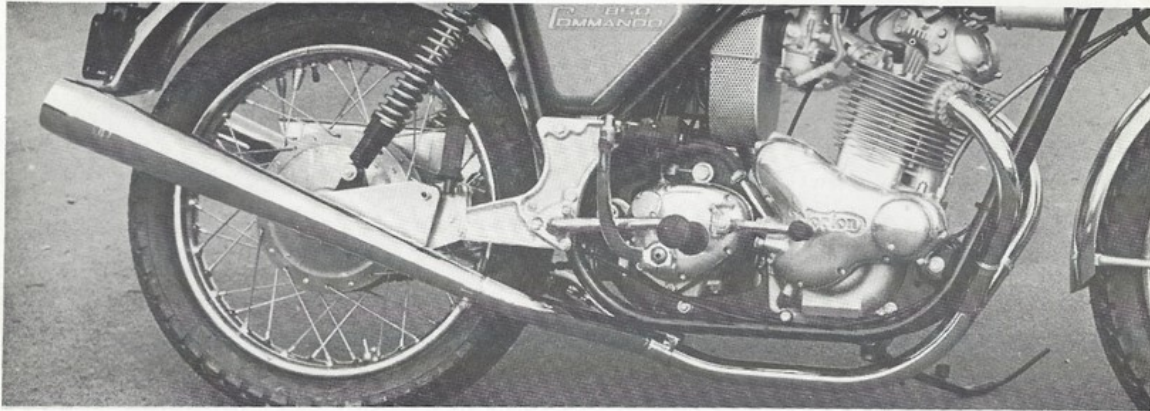
I should get it up and running shortly, and I am anxious to see what it sounds like, and how much get up and go it has!



dunstall equipment

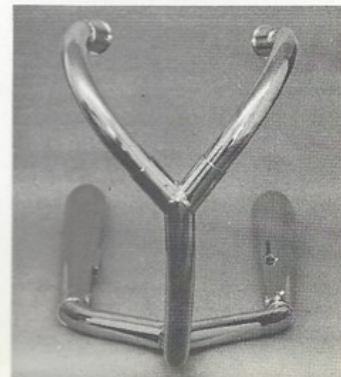
NORTON POWER STREET EXHAUST SYSTEM

Part Number 1175



This unique and unusual exhaust system designed in conjunction with Dr. Gordon Blair at Belfast University, offers greatly improved performance due entirely to the efficiency achieved by the design. It consists basically of two small diameter pipes coming from the exhaust ports and joining into one larger pipe which eventually splits back into two to join the Dunstall decibel patent silencers.

The lengths and diameters of each pipe were calculated mathematically to achieve a pressure wave cycle that would most benefit engine performance. With the aid of a suitably programmed computer it was possible to simulate the pressure waves that would be produced in the system in use. Critical alterations were then made to achieve the best possible simulated performance advantages over the whole rev range.



dunstall equipment

The first road tests carried out by a independant journalist, proved its incredible efficiency by knocking 1.14 seconds off the standing quarter mile time of a Norton Commando just by changing from the stock system to this new Dunstall Power set up. The following figures give an exact comparison because only the exhaust system was changed, just off with the stock and on with this new one and we achieved the following results:

Stock Exhaust	New Dunstall Power Exhaust	Improvement
S.S. Quarter Mile 13.45 secs.	12.3 secs	1.15 secs
Terminal Speed 100 mph	105 mph	5 mph
Maximum Speed 120 mph	125 mph	5 mph

Available to fit all Norton Commandos and supplied absolutely complete with all clamps and brackets. Fits pre 1971 Commandos with no modification whatsoever, but on post 1971 models this system requires the removal of the centre stand. Note: This system only works with genuine Dunstall Silencers and not at all without Silencers as it is computed utilising pressure waves reflected back from decibel silencers.



Blair's exhaust system for the 810 is a marvel. Two short header pipes converge just in front of the forward engine mount, a single larger tube carries the exhaust below the engine, and it splits back into two mufflers right under the transmission.

According to Dunstall, the system is worth five mph in the quarter and five mph on top. It may well be. But performance improvements aside, the pipes are worth their weight in gold in terms of exhaust note and solid noise reduction. At last! A high performance exhaust system that honest-to-God muffles.

To Dunstall's patented Decibel megaphone silencers are added his new siamesed exhaust pipes, computer designed by Dr. Gordon Blair at Queens University, Belfast. (Blair, a specialist in gas flow, studied in America before returning to Ireland seven years ago). The pipes merge into one at the front of the crankcase and divide into twin outlets beneath the gearbox. Result of this work is to boost the standard Commando's 60 bhp at 6800 rpm to 70 bhp at 7000 rpm.

Extract from "Cycle" Road Test April 72.

Reproduced by courtesy of "Cycle World"

Riverside Ride

The Riverside Ride is a go again this year. You are invited to ride along.

No Sponsors. No Clubs. Just friends out for a ride.

Same Time, Same Place, Same Route, Same Cabins. Covid Protocols

WHEN: June 26-27

WHERE: Riders Meeting, 9:00 am Saturday at JJ's Corner Shell Station. 4015 S Taft Hill Rd, Fort Collins.
(Junction of Taft and Harmony)

ROUTE: A Google map of the traditional route is attached below. Some will go their own way. It is a Riverside Rendezvous at the Beartrap Cafe & Bar, Riverside, WY.

LODGING: We are again taking reservations for the Riverside Garage & Cabins on a per cabin basis at \$80 CASH each. There are 10 cabins, most have 2 beds. Due to Covid, we ask that you decide if you want a cabin all to yourself for \$80 or if you are willing to share with another rider for \$40. If you have a preferred roommate, let us know when you sign up. In order to accommodate more long time Phantom Canyon Riders, we will give preference to those willing to share a cabin.

Space is limited... we expect to fill up quickly. We will send a confirmation email.

There may be other lodging available at Cottonwood Cabins (307-327-5151, [website](#)) in Riverside or Vacher's Bighorn Lodge (307-327-5110, no website) in Encampment. Make your own reservations there.

CAMPING: Tent camping is available free on the grassy area at the cabins or \$12 at Lazy Acres Campground next door (307-327-5968, www.lazyacreswyo.com) There is a toilet and sink restroom available at the south end of the cabins. Please let us know if you are going camping, we'll leave a light on for you.

To sign up, reply to this email at pcriders8@gmail.com For questions, call Mike Powell at 303-776-0403.

SAG WAGON: We will not be providing a chase vehicle. As an alternative we are looking for volunteers with a truck and ramps or trailer to be "on call" to come rescue any unfortunate souls experiencing a breakdown. I'm sure they would receive compensation and eternal gratitude. Several volunteers would be excellent.

MEETUPS: Due to Covid, we are not encouraging any group meetups for meals or photo ops. Let things happen spontaneously. You all know the drill anyway.

ROUTE MAP: It is a Google map, easily visible in a web browser with internet access.

[https://www.google.com/maps/d/edit?
mid=1LxRrK5kUYHcJuQDH2p74zCYo9v4R8IP_&ouid=108036198696039355588](https://www.google.com/maps/d/edit?mid=1LxRrK5kUYHcJuQDH2p74zCYo9v4R8IP_&ouid=108036198696039355588)

Motorcycle Stuff on the web:

How to overhaul your upright Norton gearbox

https://mcusercontent.com/82297a9619f863d17b3c014c3/files/6793da82-86f2-4f18-86a8-ce54790c2671/OVR_086.01.pdf

Dick Mann, 87, passed this month:

[AMA Hall Of Famer And Daytona 200 Winner Dick Mann, R.I.P. - Roadracing World Magazine | Motorcycle Riding, Racing & Tech News](#)

News about Streets Of London Pub. Anyone want to host our next meeting there?

https://theknow.denverpost.com/2021/04/27/tight-end-gay-sports-bar-denver/257416/?trk_msg=EAPF20R5N0L4H3F137ECOLNUIC&trk_contact=7F3T02BMBADAF4SF33I00TGH80&trk_sid=KAODDF66OVHSS79J5158FT47HK&utm_email=74ABF4D165122485F41EF4121F&g2i_eui=M5mOskSPuGmgP6SKgPTnxlVpo99zM4iH&g2i_source=newsletter&utm_source=listrak&utm_medium=email&utm_term=https%3a%2f%2ftheknow.denverpost.com%2f2021%2f04%2f27%2ftight-end-gay-sports-bar-denver%2f257416%2f&utm_campaign=denver-mile-high-roundup&utm_content=manual

Open SmartNews and read "Motorcycle Racer Pulls Rival's Brake Lever at 135 MPH" here:

<https://share.smartnews.com/kZYN>

James Lafler's Gertrude received her medallion of commemoration this month....



2021 Event Schedule

Hi Everyone,

The restrictions on our activities deriving from the COVID pandemic are finally easing and I'm excited to be able to think about scheduling opportunities for us to gather again in person. Many of us have already been vaccinated or are in the process, and the prospects seem good that most adults will be able to be vaccinated within a couple months. The public health authorities are now removing most of the restrictions on gatherings of the sort our club events entail, although we may find that indoor gatherings in pubs and such are still problematic for a while. With the return of clement weather, though, our most important and enjoyable events, i.e. rides, should be safe enough for most of us. Arnie Beckman and I have discussed this and we're ready to start filling in a calendar of events for the rest of 2021.

I am delighted to announce that Susie and I will host the traditional BBQ event at our house in Golden on Sunday, June 13. Normally we would do this on the first weekend in June, but Arnie has a vintage MX race in Steamboat Springs that weekend, so we're leaving that weekend alone in case you'd like to go out to Steamboat and watch Arnie smoke 'em. The following weekend (June 17-20), as you will see from the announcement elsewhere in this newsletter, is the popular Four Corners Rendezvous at Sam Manganaro's place in Mancos. So early June is pretty crowded but we're betting that after a year off you're ready for some catch-up.

David Sheesley has already announced he will host his traditional Independence Day brunch, combined with a group ride over Squaw Pass. I think this will be on July 4, but keep an eye on the event page of the website and the newsletter for possible adjustments.

As many of you know, Bob Ohman has spent that last 5 months in the hospital with a series of health crises. He's been making excellent progress lately and should be home again by the time you read this. I have raised the possibility with him of running The Old Bike Ride this year and I expect a decision will be made within a week or two. There is a chance we will do it on the traditional Sunday after Mother's Day, which is May 16 this year.

At this point I am throwing open the discussion of club events to all of you. After our forced hiatus I have wiped the calendar clean of all other "typical" events for the rest of the 2021 ride schedule. If you have a proposal for an event of any kind, whether it is a reboot of one that we've done traditionally or something brand new, send them in to me and we will see what kind of event schedule can be made of them. If you are wanting to do something with your friends from this club and you're not seeing announcements of the kind of events you like, LOOK IN THE MIRROR.

I am personally delighted in the response to our membership renewal campaign for 2021, nearly everyone has renewed. I take that as an endorsement of your expectations that we will soon be having some fun again. Let's do it!

Eric

2021 4 CORNERS RENDEZVOUS

(Yes, it is still going on all these years)

When: Thur. -Sun. June 17-20th

Where: See map for directions to Sam Manganaro's Place 14984 Rd 31, Mancos CO 81328

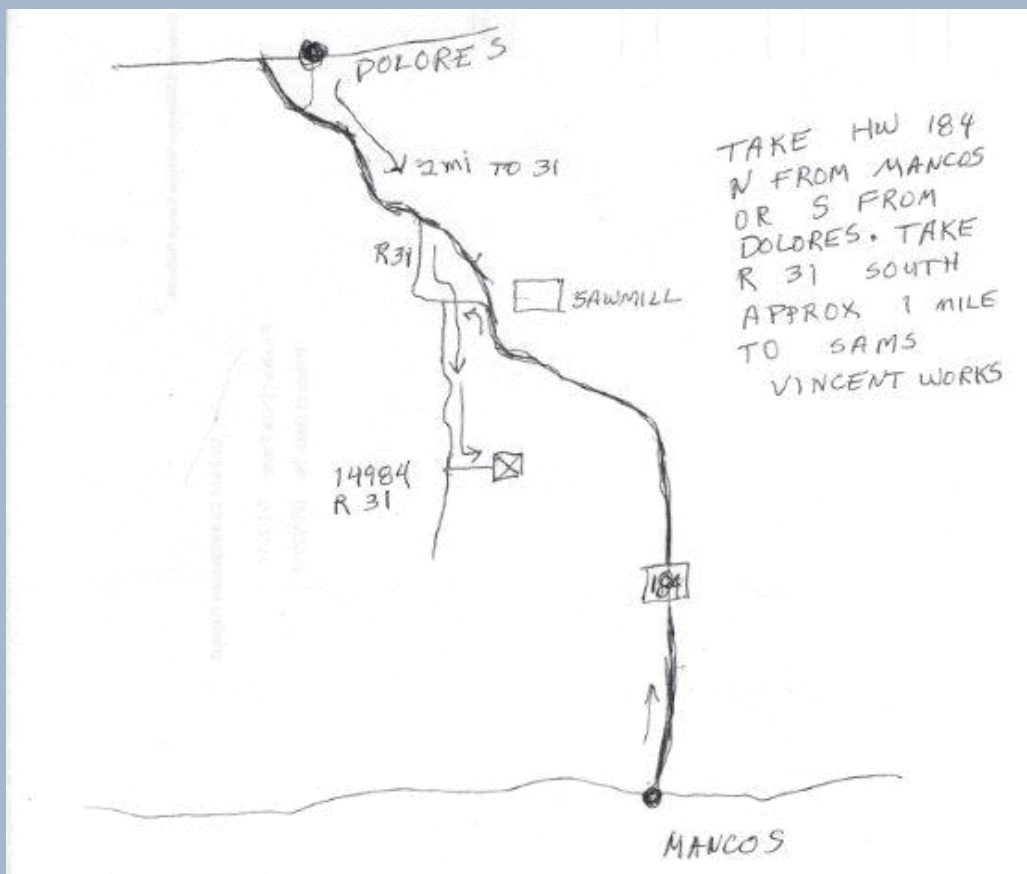
Who: Hosted by Western Slope Norton Riders and Norton Colorado.

Includes: Fee is \$30.00 for tent camping, morning coffee, good food planned for Friday and Saturday night, door prizes, 50/50 drawing. If you aren't camping there are motels close by in Dolores and Cortez. Amazing mountain roads and unbelievable, but true campfire stories.

For further information contact Steve Harris at sharris@frontier.net or call 970-946-1960.

(Please R.S.V.P. so we can figure food)

This is a save the date notice, details may change and change our plans. County and state covid regulations will have to be observed. We will send out updates as we become aware of any changes. Thanks for your patience.



Norton Colorado 2021 Event Schedule

These are the events planned so far. As you can see there is still plenty of open time for you to host an event. Events can be a ride, a lunch meeting, a tech session or whatever your little heart desires it to be.

May 23 (Sunday) Gentleman's Ride

June 5 - 6 (Saturday - Sunday) Vintage racing, Steamboat Springs, Arnie Beckman

June 13 (Sunday) BBQ at Eric and Suzy's house

June 17-20 (Thursday-Sunday) Four Corners Rendezvous

June 26-27 (Saturday-Sunday) Riverside Ride

July 4 (Sunday) Mt. Evans Ride and Brunch at David Sheesley's

July 31 - Aug 1 (Saturday - Sunday) Wimpy campout hosted by Jamie and Michelle Jones

September 18 and 19 British Conclave Ride Saturday, Show Sunday

October 3 (Sunday) Plains Ride hosted by Scott and Julie Robinson

November XX Put your event here hosted by your name



Membership

Membership in Norton Colorado is open to anyone, regardless of whether they own a Norton, or any motorcycle whatsoever.

Dues are \$20/ year individual, \$22 for a couple or family unit, payable to "Norton Colorado" and sent to the Treasurer, whose contact information is listed on the last page of this newsletter.

The official club membership list is posted on the club website. Please let Eric know if there is an error.

The membership year begins with the Winter Banquet in February. New members who join after August 1 are credited with membership for the following year.

Club Events

Many events have been scheduled for the 2020 season, usually about 2 per month. Participation in these events will be counted for the President's Award. Events may be added, dropped, or re-scheduled through the year. The schedule can be found in this newsletter or check the schedule on the club website:

<http://www.nortoncolorado.org/meetings.html>

Prez Points Standings Top 10 (2020):

points, events, solo rides

Jack Abeyta	35
Peggy Abeyta	25
Scott Robinson	23
David Sheesley	17
James Lafler	15
Debby Johnson	12

Jack does it again, for the 6th time!!!!



Current Occupants

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arniebeckmanp11@gmail.com

Secretary

Eric Bergman (303) 278-7445
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Treasurer

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comnoz2@juno.com

Credits: Thanks to Peter Allen, Eric Bergman, Jesse Carraway, Jim Colt, James Lafler, Frank Puckett, David Sheesley and Al Slarks for their contributions to this newsletter. I also want to say thanks to others who sent me things I will use in future editions.

Norton Colorado

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Golden, CO 80401

