THE SOURCE 08|2020

Dear Andover Norton Customer,

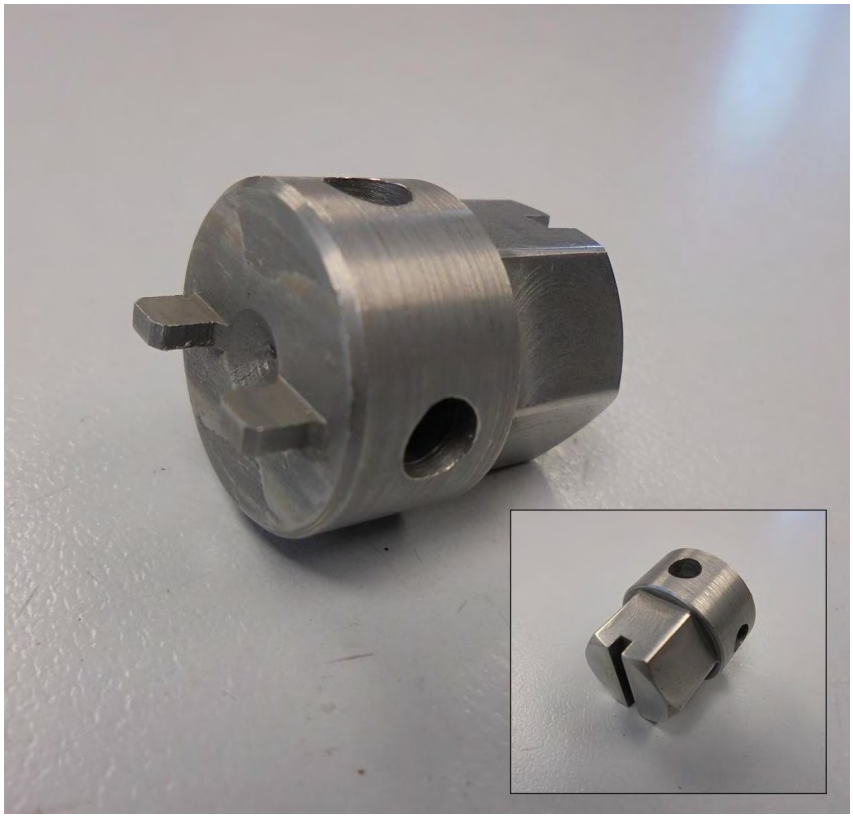
Apologies for the omission of the July “Source”. Holidays and pre-holiday overload put paid to my plan to write the July edition but we hope you will find this month’s worth the wait.

The last three months were very busy and a shortage of parts from our contractors led to gaps in the spares portfolio. The backlog is now gradually reducing, and long-overdue items are now either back in stock or at least imminent.

Further investment in equipment and software is ongoing. This is another major project that should get the orders out to our customers quicker. We hope to have everything up and running in the next 90 days.

New Products:

One for Norton pre-Commando and Triumph customers alike should be our latest tool 13.1765. Never happy with the offerings already in the market, we hope this will be the clutch spring adjuster tool to end all clutch spring adjuster tools.



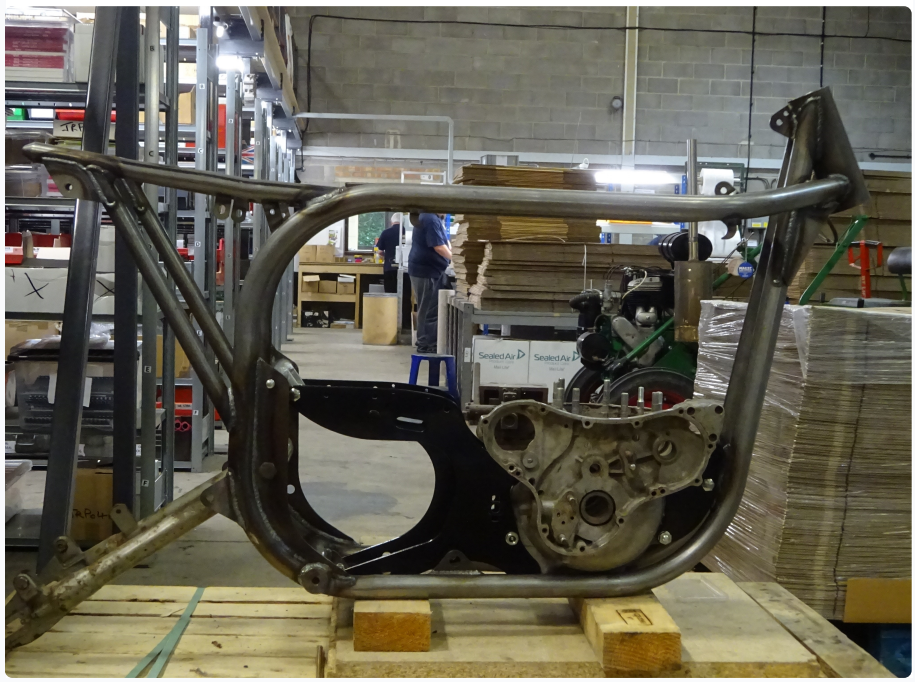
Shop

Wideline Featherbed Frame

Shop

Our new frames, part NM20060, are replicas of the road-going 1957 Norton Wideline product. They were manufactured by a long established motorcycle frame maker based near to Andover Norton’s Hampshire site.

The frames contain all the original brackets for customers wishing to produce a road bike, although special builders may prefer to remove some. The frames are supplied unpainted and made from 2mm (14swg) ERW seamed tube with MIG welds.



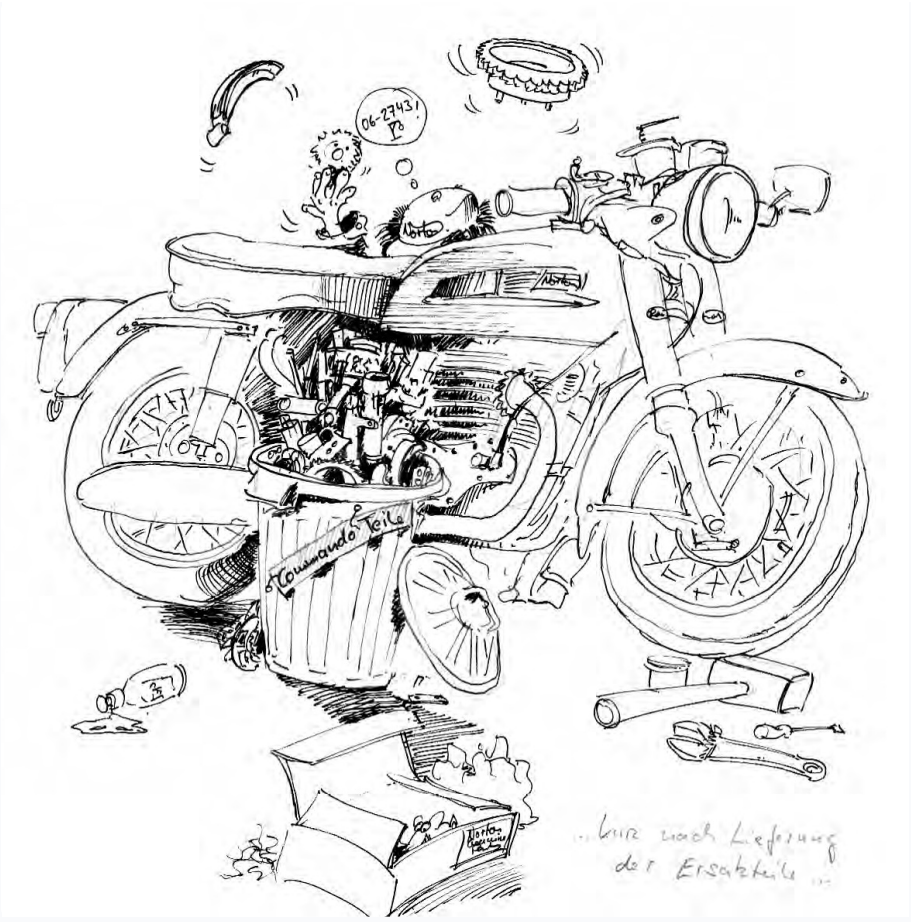
Touring the Black Forest:

With the virus about most sensible people tend to stay near home in their holidays. My wife and I luckily found an apartment in the Black Forest for the second half of July and the company van allowed us to take the “Tangerine Coloured Whatsit” for little excursions between hikes through vineyards and mountains at mostly very high temperatures.

One particular ride I remember most fondly, 3.5 hours up hill and down dale in perfect temperatures that day, with the occasional stop. Even my pictured “boss of bosses” (Phil Albutt’s description) loved it!

Memories of an unexperienced Norton parts dealer:

Sorting through masses of old paper I came across this amusing caricature I received from Holger Loenze, then a young customer. I found him on the net, he is now a sculptor in Ireland (https://www.holgerlonze.info/). Naturally I asked for his permission to use the picture which he kindly gave, writing that his old Atlas was, after many adventures in Scotland and Ireland, now awaiting restoration. At the time, either out of ignorance or not fully realizing he had an Atlas, not a Commando, I sent him parts, some of which came straight back because I supplied the Commando variant: Hence the bin “Commando Parts”!



Though the same could not happen to me now, it often happens customers don’t know the difference between Commando and Featherbed components. Only this week I had a customer order a bolt-on rear sprocket for a Commando and finding the long sleeve nuts had the wrong thread. Given he owns a featherbed special this was to be expected. He needed the sprocket for a Dommi (26TPI), not the identical-looking Commando item that has UNF threads (24TPI).

SPA 1973

In his book “Norton Commando”, shortly to be reprinted in a new, improved edition in hardcover by Andover Norton, Mick Duckworth writes about “Mr Reliable” Richard Negus.

Richard, as many will know, built the most reliable Norton long-distance racers and one of them made 2nd place in Spa in 1973, achieving an average of just over 100mph in the 24-hour-race. We recently received this write-up by his helper Bruce Henderson. Richard had told me once of their quick filler, an important component to keep pit stops as short as possible.

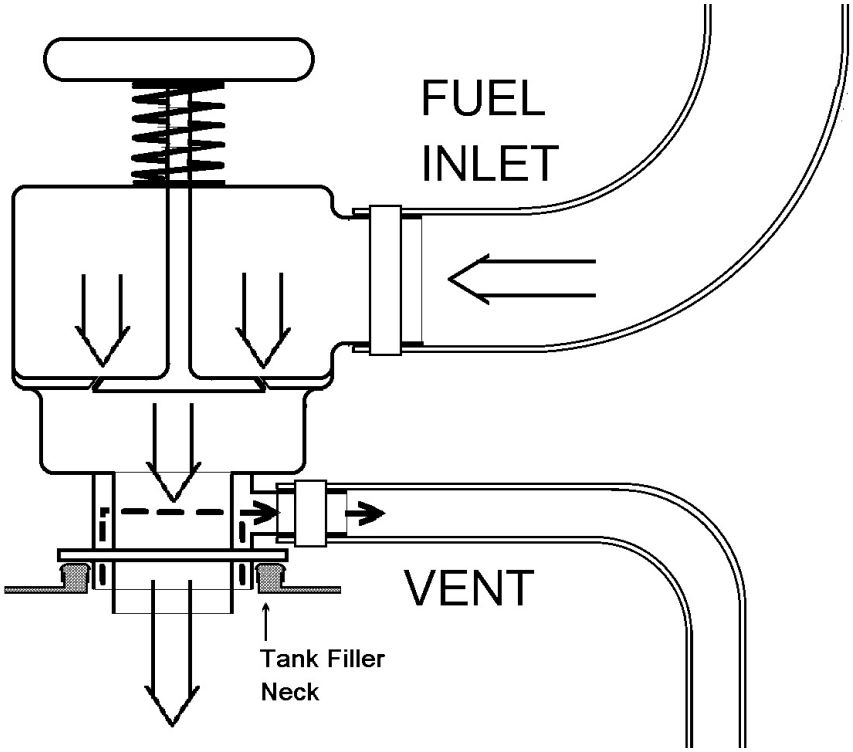
Here is a photo of Richard Negus servicing the 750 Commando Production Racer at the Spa 24-Hour Endurance Race 1973. I was going through some of my old snaps and found this in a folder - a paper folder -- remember those? From the flies on the fairing and sun angle, I'm going to guess mid-day on Sunday; I believe that the race ran from 4PM on Saturday until 4PM on Sunday. You can see

the two large headlamps; there was not enough power from the alternator to run them both, so the rider has to switch the dipbeam switch to select one or the other. The right hand one was angled over for left turns and vice versa; either one threw a good beam down the centre as well. They were not nearly as aerodynamic at the soon-to-be developed JPN twin headlamps, but it worked!

If you look down behind the rider's forearm over on the left side, you can see two plastic pipes. They were for our new refueling system. Previously, Richard had been using a funnel and can which was clumsy and slow for a 6-gallon large-version PR tank. I suggested something like a system I'd seen American racers used -- a large funnel with a bung in the bottom. A mechanic would drop the funnel outlet into the opened (empty) fuel tank and pull a cord on the bung. Crude but effective - and too crude for what we wanted.

I suggested a valve that did the same thing, with pipes for fuel feed and a smaller one for vent. We sketched up what we wanted -- a canister with a 1 3/8" hole in the bottom and a 5/16" hole in the bottom; the lads in the Wolverhampton foundry cast a blank up to Richard's detailed drawing, A 2" inlet pipe was on one side and a flat on a side parallel to the spigot pipe accommodated the tank cap on its hinge. Richard found an old Gold Star inlet valve, it was lapped into the hole in the bottom with the valve stem protruding through the top hole which had a little lip seal let into it.

A loop handle on the tip of the valve with a sturdy spring between the handle and the top surface and a 2" diameter plastic pipe 15 feet long completed the cast valve body. Richard brazed up the lower canister from sheet steel. It had a flange set by screws into the bottom surface of the upper canister and an outlet pipe to fit the tank filler. There was a smaller - about 1" - vent stub on this, parallel to the larger inlet stub . A clear plastic vent hose ran to a bucket. All that was left to do was the fuel can. Remember the old 5 gallon petrol cans with the conical top and the screw-in plug? Richard obtained one, cut the bottom out and brazed in a 2" metal outlet pipe. The other end of the plastic filler pipe, with a Jubilee clip, finished things up.



We just finished it in time and we'd never used it "in the heat of battle" when the race started. After two hours, Richard signaled the first rider in for a change. That was my cue to fill the petrol can - I had planned to merely hold it high enough to flow but when we got to Spa, we found that the pits had a concrete overhang ceiling with a metal handrail on the top. A quick couple of cords on the can and the can could be hoisted high enough and lashed there for each refueling.

By standing on the mechanic's counter on the pit, I could look down into the petrol can and watch the entire operation. The valve was put in the bucket with the vent pipe outlet. The first rider came in, hopped off, and the bike was up on the rear axle work stand. Then Richard flipped open the filler cap, seated the outlet pipe into the tank neck, and pushed the handle. For about 5 seconds, nothing happened -- at least not that he could see. The large pipe was full of fuel but there was no movement or sound -- at least that he could see. I glanced at the hanging can and realized that the level was dropping at a rate about 1 1/2 second per gallon! Richard had the sudden thought - "nothing's happening, what's wrong". He released the handle, lifted the valve and pressed it down onto the filler neck, and pressed again. He looked up at me with a questioning look, just as I saw a plug of petrol maybe 2" long spit through the vent pipe, and another, then it was a solid run of fuel in the vent.

Above: 1974 at Barcelona 24 hour, Pete Davies riding.

I screamed "Richard!! Off - off - that's it." He thought that I meant "take the valve off, we'll fill it with a plain funnel and cans". He lifted the handle again, looked and saw that there was no fuel now in the vent, gave it a little shake, and lifted the valve. (All this happened in much less time than it takes to read it.) He lifted the valve gently to assure that no fuel would leak out - it didn't - so he handed me the valve which I just dropped in the bucket. He looked back at the filler neck and there was the top level of the fuel about 3/4" inside the neck. His head popped back in shock, and he looked over at me with an exuberant look that showed he just couldn't believe it.

*He quickly went about checking oil, dropped in a squirt, lubed the chain, looked over the tyres, then we pushed the second rider off after less than a 30 second pit stop. We went over to tidied away tools, oil cans, wiper rags, and things. As I put the vent bucket away, he pushed the bike and rider off and looked over at the valve in the bucket and then looked at me and said "B****y hell, that thing really WORKS, doesn't it!?!?" And it did for the rest of the race, smoothly and accurately. He looked down at wet spots on his trousers and realized why the bike had been a little hard to start after the stop, we had matched the vent a little wrong and it had pressurized the tank and sprayed fuel out the carb ticklers!*

At the next stop, turning the petcocks off was first order of business, then after that, the riders would switch them off as they coasted in and there was no more problem. That's why there are two clear plastic pipes hanging along the side of the motorcycle. By the time the photo was taken, it was all "drama over", push the valve in for 8 seconds, check oil and lube the chain, and send the next rider out.

After 24 hours, the riders had averaged a fraction over 100 Mph for the entire 24 hours of the race, the first time a Norton had achieved that feat during any endurance race.

Ah, good days. Thanks and best to all.

Bruce Henderson

Joe's Note: After sending Richard the draft of this “Source” he wrote back:

Bruce's memory of 1973 is better than mine, although his story brought it all back to me.

I was talking to Pete Lovell very recently and he reminded me that we had absolutely no idea how far the bike would run on a full tank, naively guessing at two hours. At about 1.5 hours, the engine coughed, Pete switched on 'Reserve' and came unexpectedly into the pits. After a bit of confusion, Peter Davies exited for his first session. Both riders lapped within seconds of each other for the complete 24 hours.

And this was 47 years ago, almost to the day and as far as I know remains an unbroken race record for a British bike.

The Mercedes/Norton tie-up:

A customer just sent me this picture, asking if I knew the gentleman on the Atlas. I must admit I did not, but the sender and my motorcycle historian friend Stefan Knittel cleared the matter up:
It shows Rudolf Uhlenhaut, Technical Director of Daimler Benz, responsible for pre- and post war Daimler “Silberpfeil” race cars, constructor of the 300SL Gullwing and the C111 Wankel.
His mother was English, he visited Bracebridge Street in the 1930s and knew Arthur Carroll. The Atlas was his son’s bike.
Another connection to Norton was Beta Barenyi, responsible for Daimler Benz passive safety in cars, who once worked as an engineering consultant for Norton.

And yet another historic picture:

Our retired MD Nick Hopkins is going through motorcycle papers of the late ex-Norton Sales Manager Keith Blair and found this photo of the “NVE Andover Team” in North Way ca.1971.

If a reader of our newsletter can help to identify the people in the picture we’d be grateful. Easy to recognize is Hugh Palin, at first a motorcycle industry lobbyist who then became a Norton director and later Director of the AA.
Nick identifies the second on the right as Keith Blair. I did not recognize him without the beard!

Phil's Bit
Norton Notables

Carburettors, the Supermarine Spitfire and a Norton M30, are a combination of mechanical items which identify a small part of the life of Beatrice (Tilly) Shilling OBE PhD MSc CEng (8 March 1909 – 18 November 1990).

An apprenticeship as an electrical engineer to Margaret Partridge a forward-thinking lady, who was involved with the Women's Engineering Society, encouraged Beatrice to take a degree in Electrical Engineering at Manchester University where she graduated in 1932. She continued her education by going on to complete an MSc in Mechanical Engineering in 1933. She then became a research assistance investigating the behaviour of supercharged single cylinder engines. Recruited to The Royal Aircraft Establishment in 1936, she became the leading specialist in aircraft carburettors.

During the Second World War she worked on a serious problem affecting the Rolls Royce Merlin engines which would misfire or cut out during diving, and designed a simple flow restricting device which became known as 'Miss Shilling's orifice'.

Shilling raced motorbikes at Brooklands in the 1930s, one of only three women awarded a BMCRC (British Motorcycle Racing Club) Gold Star for lapping the circuit at over 100 miles per hour (160 km/h) on her Norton. After the war, she raced cars, mostly at Goodwood Members' Meetings.

Shilling married her husband, George Naylor, in September 1938. He also worked at the RAE. According to anecdotes she refused to marry him until he had also been awarded the Brooklands Gold Star.

A remarkable lady.

The Ultimate Barn Find: Our 1936 Model 50

We were offered this “beautiful British Classic in mint Condition” out of the blue during my holidays and my immediate reaction was: “Buy it!”
Two reasons for my reaction:

Firstly, unrestored, untouched bikes are getting rarer by the day. As a fan of pre-war Nortons with my first ever Norton being a (real civilian) 1937 16H that all of us, myself and my children, now Andover Norton’s shareholders, started our vintage racing on, it itches to restore this rare, mostly original model. But then one shouldn’t!

Secondly, apart from the Triumph silencer and the typical post-war addition of a dual seat most other components are there and original.
It will serve as an inspiration to our team and our customers alike showing what is still out there. No doubt our fantasy will run wild thinking what it looked like new and how beautiful it would look restored.

According to our Norton Records the bike was despatched from the Bracebridge Street factory on 9th October, 1936 as a 1937 model to Smith in Leeds. Correctly shown as extras are “Dynamo, Footchange, Tank Panel, Horn & Speedo”.
No end customer is listed which normally means the bike was exported. I hear we have since got some material from the deceased owner’s family and as soon as I have more information I will put it up in the “Our Bikes (and Tractor)” section of our homepage.

Simon’s Bit:
Road hazards

On my country commute to and from Andover I’m always on the lookout for road hazards. Deer are a common sight on or next to the highway. A fox once crossed in front of me. Gravel patches accumulate in the road after heavy rain. Potholes and irregular tarmac surfaces are taken for granted and carefully avoided.

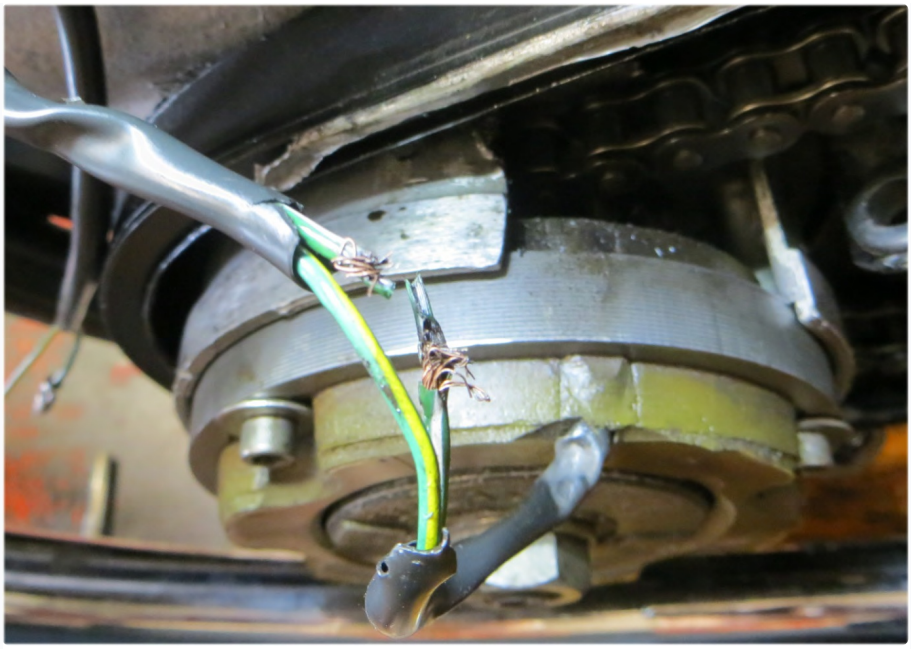
However, it’s unusual (thankfully) to find farm implements in the road. Coming over the hill in the distance I saw something on the lane. I was travelling slowly so had plenty of time to stop, pass the object and turned around. No other vehicles appeared in the few minutes it took to place the tool out of harm’s way on the side of the lane.

Our Bikes:
Joe’s Mercury:

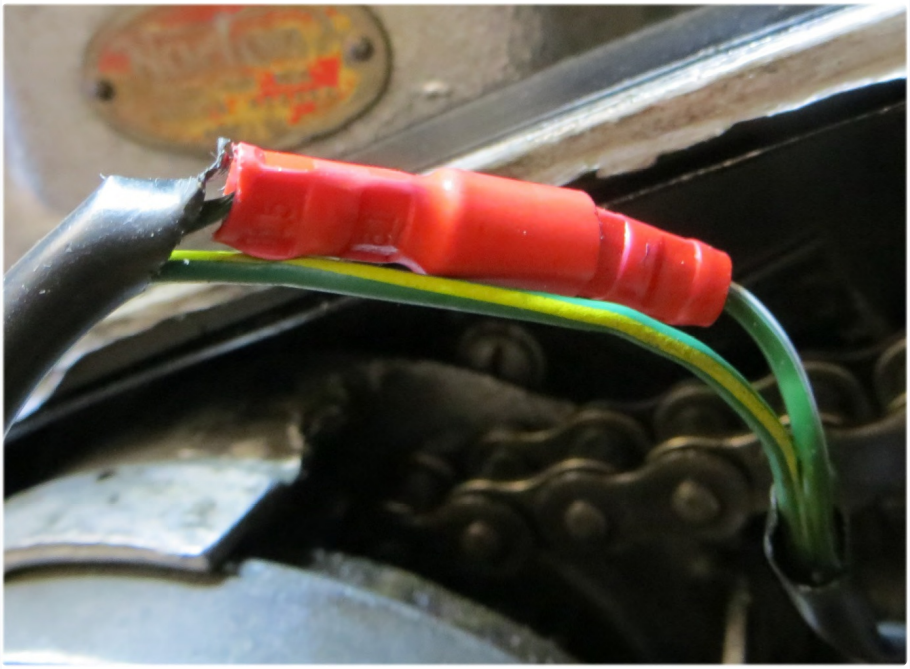
Last year, coming back from a local Triumph meet, I was flying along happily on my Mercury when all of a sudden it cut out and died. Fortunately I wasn’t far from home. Even more fortunate was that my daughter (and Andover Norton shareholder) Christine was home so she came to the rescue with our Sprinter van.

I put the bike into a corner and worked on other projects until earlier this summer I test-rode it again and noticed it ran on constant discharge and cut out as soon as I switched the lights on.

I then checked the whole wiring loom and found nothing. Only after putting it away again it dawned on me the alternator may be the problem.
Opening up the chaincase, which I had never done after buying the restored machine a few years ago, I found this;

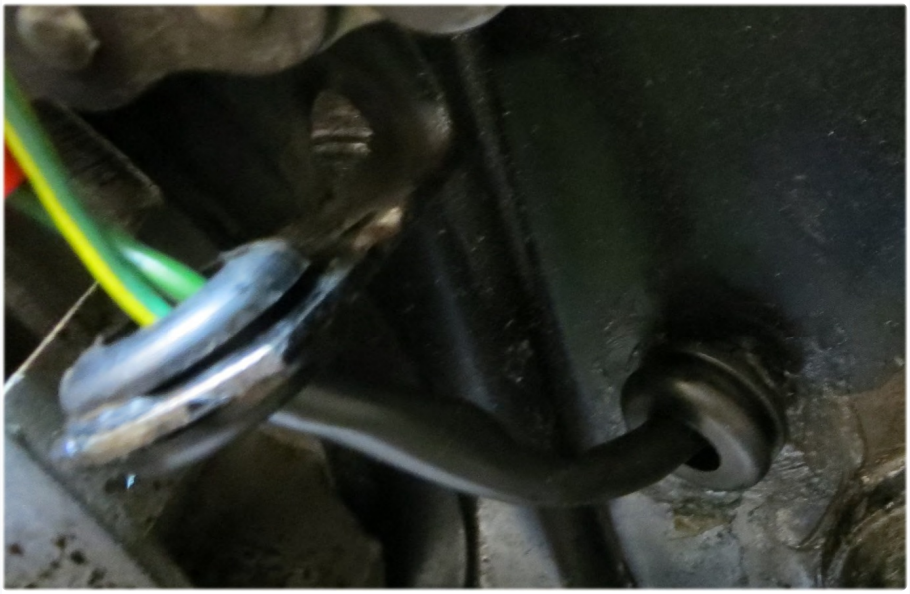


The cable was far too long inside the chaincase and had obviously been cut by the primary chain. Fortunately this was easy to mend:



And after putting some shrinking hose over it it could all be put back. On that occasion I noticed the restorer had used a Commando grommet 06.0903 for routing the cable through the chaincase (the right hand one in the picture, too small in OD and hence loose in its hole), but we have since introduced the correct grommet NM24595 (bottom left), which now properly sits in the inner chaincase:

I put the correct grommet in (picture shows grommet not yet pushed home) and put a cable tie around the cable at the rear of the chaincase so the cable cannot creep in again, thus getting in the way of the chain.



A short test run showed all is well in the charging department now.

Calendar Competition

Thank you to everyone who has sent in pictures for our competition! Entry has now closed and we will begin the voting process for the best ones. If you have entered, we may contact you for some additional information about your bike if required.

Once the winners have been chosen we will be in touch!

That's is all we have for this months "Source" so until next time!

The Team at Andover Norton