THE SOURCE 11|2021

Dear Andover Norton customer,

As we are going into the grey and cold winter months that offer the opportunity to do all those jobs and rebuilds that summer was too good for, Andover Norton gradually gets back to normal with our range of parts.

Due to supply chain delays we were out of some rather important components in the last few months. A fact that, believe me, nobody was more embarrassed about than our buyers, Karl, and myself. Conrods are due this week, camshafts aren't far away, and the new sound-reduced silencers are actually overdue now and we hope to be able to supply them very shortly.

Meanwhile a lot of small items were added to our portfolio, so if you own not only a 1950s or 1960s Norton but also the relevant parts list for it you will be positively surprised how many parts we can now supply you with.

If you lack a parts lists, workshop and rider manual, you can find them in our webshop for your Norton or Triumph model in the books section: https://andover-norton.co.uk/en/shop-category/42/book

Plans for Next Year

Open Day:

We hope we will be able to hold our Open Day next year after a two-year pause. Provisional date is the 21st May, so please put this into your new Andover Norton calendar!

Stafford Show:

Karl has booked a stand for Andover Norton for the Stafford Show 23rd/24th April next year, to meet our customers and to sell our "seconds", i.e. parts that are useable but not perfect enough to be sold at full price. Again, a date to put into your calendar!

Shipping:

As Christmas approaches, so are possible delays in shipping due to the load of parcels sent in the season. Please watch the following dates:

Country/Territory	2021 Last Collections for Delivery on/before 24th Dec
AUSTRALIA	16/12/2021
AUSTRIA	22/12/2021
CANADA	21/12/2021
DENMARK	22/12/2021
FRANCE	21/12/2021
GERMANY	21/12/2021
ITALY	22/12/2021
JAPAN	21/12/2021
LUXEMBOURG	22/12/2021
SWEDEN	21/12/2021
SWITZERLAND	22/12/2021
UNITED STATES OF AMERICA	21/12/2021

Another Rocker on British Roads!

We are responsible for the lamentable fact the British Isles have yet another good citizen transformed into one of these characters that exist only on the fringe of society, the motorbike rocker!

See the picture of a once respectable man now into outlawship and tearing up the tarmac of the Queen’s highways, and (worse!) looking happy doing it.
This character was once the Managing Director of Andover Norton whom we gave an NVT “Easy Rider” for his retirement, not realizing what this might lead to.

Seriously, our Phil is all set to actually use the beast, which makes us all happy.
Writing about how Phil and I spent 14 years in the harness together made me realize my family has now owned Andover Norton for longer than any previous owner. ANIL was owned by Norton from 1977-1982, when it was sold to Mike Jackson and Peter Sellars, who was later replaced by William Colquhoun. In 1995 ANIL was sold to Regal which then became BSA/Regal, and since 1st April 2007 we owned it.

Norton Cosworth Prototype

At the recent Bonhams auction, a supposedly works prototype from the 1970s was sold for £6,000 Pounds and a spare engine for £3,400. Cheap for a prototype you think? Well, that depends….

Its discussion led to some surprising results. Firstly, the bike looked as if it was fumbled together in a chickenshed. The sorry looks provoked Richard Negus to the comment: “Although I'd like to believe it's the long-lost prototype Cosworth (I doubt it) 'cos it looks so awful. I recall seeing Tony Dennis with half a DFV cylinder head which he’d got from Cosworth in the early days of the project, but no other parts that resemble that engine. I'm sure Fred (Swift) would be appalled to hear he might be associated with such a lash-up.” (Fred Swift was Norton’s builder of the various prototypes for many years and was with them until the end in Shenstone, J.S.)

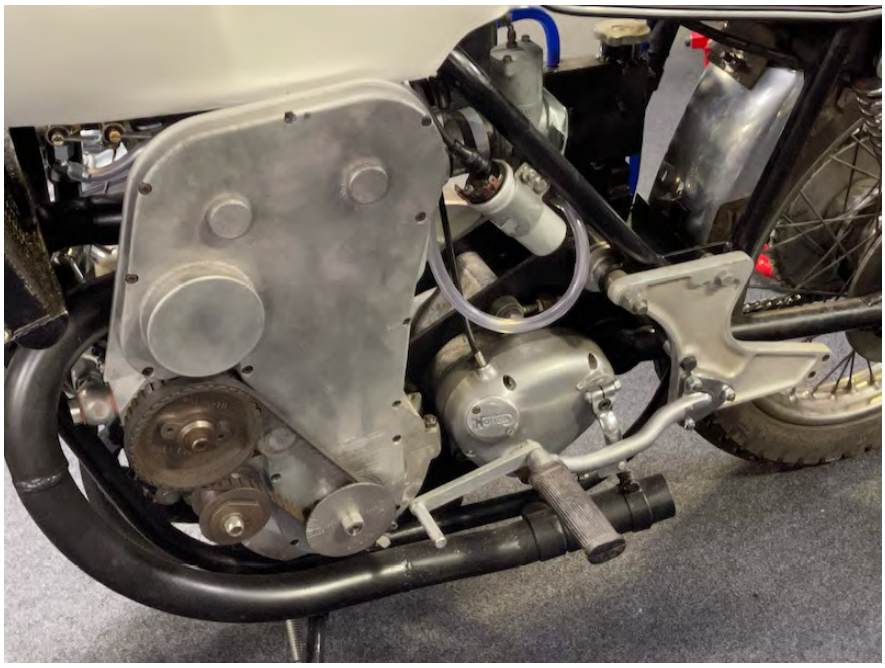
Later Richard wrote: “The only thing that would convince me that engine is genuine would be to see the crank, rod, pistons and cylinder head. At one time, Tony Denniss was touting around a sawn-off DFV head as the basis for the P86 engine.”

Nick Jeffery went into the whole theme with more time and effort than I and found:

“Mick Ofield recalled that they did construct a test mule engine by

chopping two cylinders off a V8, making the cylinder block and blanking off any holes left. He said it would have been good to get more pictures showing different aspects but thinks the picture shown may have been a set-up intended to do some sort of evaluation of an SU carb installation which the Challenge was supposed to have in its road incarnation and also would possibly have gone on the Commando if production had continued. I recall Bernard Hooper was a great supporter of the SU carb but it is a difficult object to package on a motorcycle given its size.

As the Cosworth power unit for Norton in both road and racing applications was to be unit construction and the test mule is of non-unit construction (i.e. with separate gearbox) it ‘appears’ that this might have been at a very early stage in concept evaluation.”



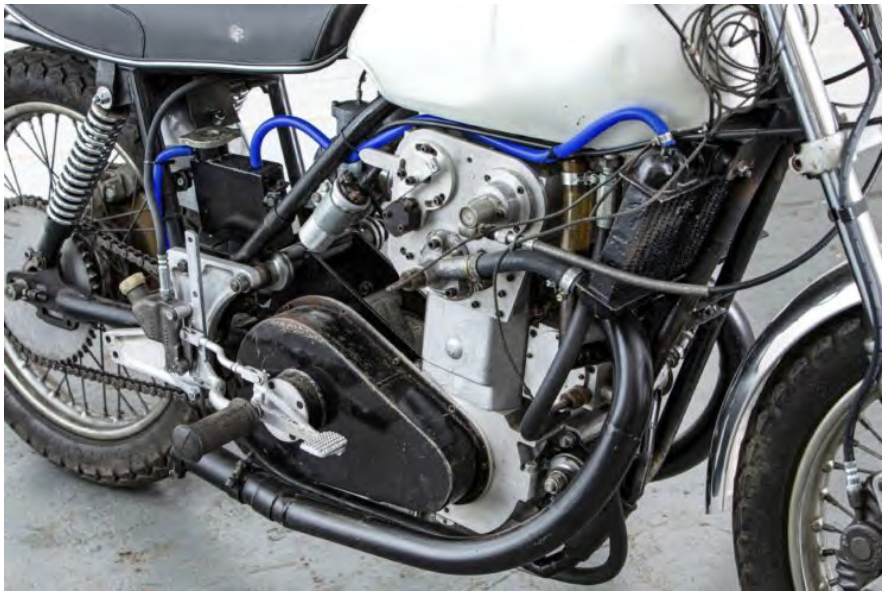
Mick Ofield has no knowledge of the complete bike. He suggested Bob Rowley (a Wolverhampton test rider) might be good to ask if it ‘saw the road’.

Mick Duckworth contacted Bob who responded that he cannot recall seeing the stand-alone engine (which contrasts with Mick Ofield who remembers the engine but not the complete machine) but did ride the bike at MIRA.”

Bob then wrote in an e-mail to me: “One of the Project engineers was Ray Price, who later worked for an oil company, but I lost track of him; at MIRA on the timing straight, I managed to get it to achieve around 116 mph by pulling the throttle cable with my left hand. This was a carburated motor as the fuel injection was not ready. The rolling chassis was an ex mileage bike. Our Chairman Dennis Poore and Cosworth’s Keith Duckworth were in attendance also Alan Lines, of AMAL.

This was its first runs and of course needed more refinement. Still, it's fair to say it did not overly impress. The reason that I pulled the cables was the slides were not fully lifting due to the one into two cable connector being a fraction short on stroke. But this certainly looks like the (lash-up) bike that I rode. This was in Barbour suit and wellies as I had lent my leathers out to Bertie Goodman, so it was a little bit faster than a 750 cc Commando. The first motor was run at Marston Rd,

Wolverhampton, and we all had bets on its first BHP output off the bench, so to speak, everyone had high hopes for massive figures based on the F1 production, but I think that the very first run-up gave less than 50% of what was being expected."



Bob Rowley then made contact with Ray Price who writes: "The Cosworth in a Commando chassis could well be the one. Although a running bike, it was only a rough prototype to check that it was a feasible engine for motorcycle use. Also things like radiator size and carburation, as the car racers were fuel injected. I remember splitting a fuel tank to carry both petrol and engine oil. It was originally for sale back in 1976 at the old Villiers factory."

And Bruce Henderson added: "I seem to remember Sam Wheeler telling me that they "motored" that engine on the electric dyno i.e. used the dyno motor to turn over the engine to assess bearing drag and other internal friction rather than using the dyno measure the power output. He told me that with everything warmed up and set up as best as seemed possible, it showed over 30 Hp in parasitic internal losses. That was with oil pump and transmission (in neutral) but no alternator. He was profoundly disappointed in this and said that he didn't know how they could get enough power out of the engine to overcome that kind of internal friction and other losses and still put out enough at the rear wheel to provide a reasonable amount of power on the road/track."

So, basically, this is a lash-up that did not lead in direct line to a working, road- or raceworthy motorcycle. It thus presents but a curiosity that accidently got into private hands. It is of no direct historical value and the price was probably fair for that.

Talking of the real Cosworth Norton engines Richard later wrote: "Talking to Peter Kirby on various things last night. he remembers seeing about 12 crated Cosworth engines when he first started at (the Norton factory in) Shenstone. There were originally 25 units delivered to Wolverhampton, stored in #4 works on Sunbeam Street. I wonder where they are now?"

The 'last ever' Commando

This bike is a hard-dying myth that even Andover Norton's ex-owner Mike Jackson still believes. It is by no means "the last ever Commando". #336456 may well have been the last new 850Mk3 Commando our Company sold but it was in fact tested and accepted on 11th October 1977 with the last ones actually tested and accepted on 20th October, the last entry being 336537 and to the best of my knowledge the really last one was the bike built for works manager John Pedley with number 336539.

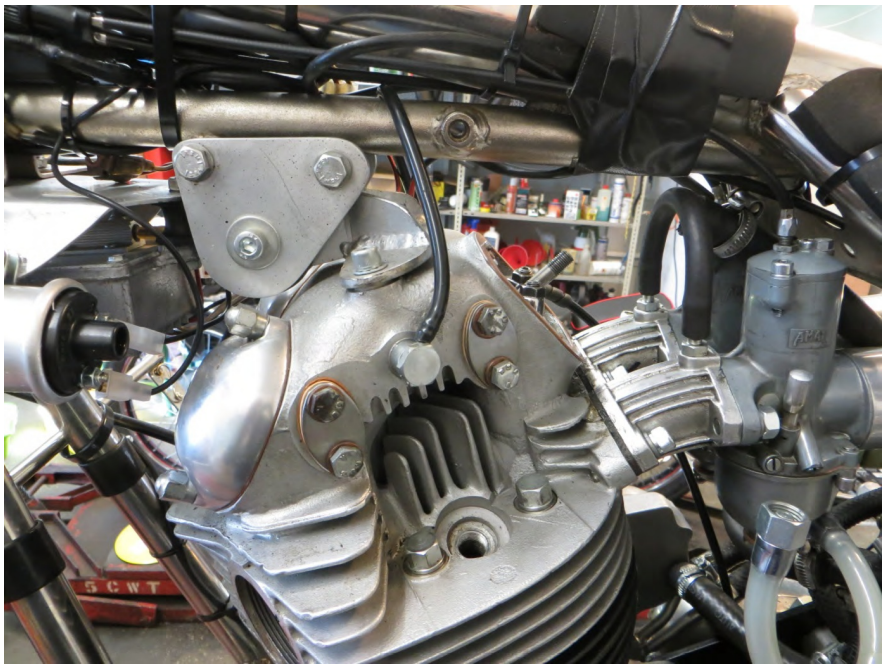
The bike was sold in the same auction for £18,000.00.

Own Bikes: My TX750

As I have said in last month's "Source" I had a piston seizure on the right hand pot on my TX750 in Rijeka this autumn, this being the second one on that side, with the left hand side looking fine.

Always happy to admit own mistakes I had speculated whether I had made one when I put the mixing chamber caps back on. With the engine higher up in the frame than on a “normal” Commando this is quite a squeeze hence I might have undone the clip on the throttle needle which will then lead to the needle falling into the needle jet, thus blocking it and leading to far too lean mixture.

Imagine my relief as I took the slides and needles out of the carbs to get the head off and found I had done everything right and both needles were safely clipped and in the same position. I also found no air leaks between carbs, manifolds and cylinder head so back to my old suspicion something is very wrong with the right hand carb body.



Though I haven’t found the fault yet I had already bought a set of 33mm carbs off Angela Hemmings that I will now put on, originality be damned, and to see where that gets me. I want that machine to run properly next season, as I still have no idea how that short-stroke race engine performs!

Talking of originality, the racers had 33mm carburetors achieved by opening up 32mm bodies, and “non-original” they will be only by not using the original carbs that came with the bike when new. That said I DO wonder about the 18” front wheel I bought the bike with as all pictures I saw of the other 9 (if that many) existing TX750s had 19” fronts…..

Our Omega Pistons

Ashley reports:

Some have asked what CR our Omega pistons will give. The design was required to give around 10.4:1, but as you can see this looks like it is slightly less than the Wiseco AMA piston when you look at the crowns in the photo.

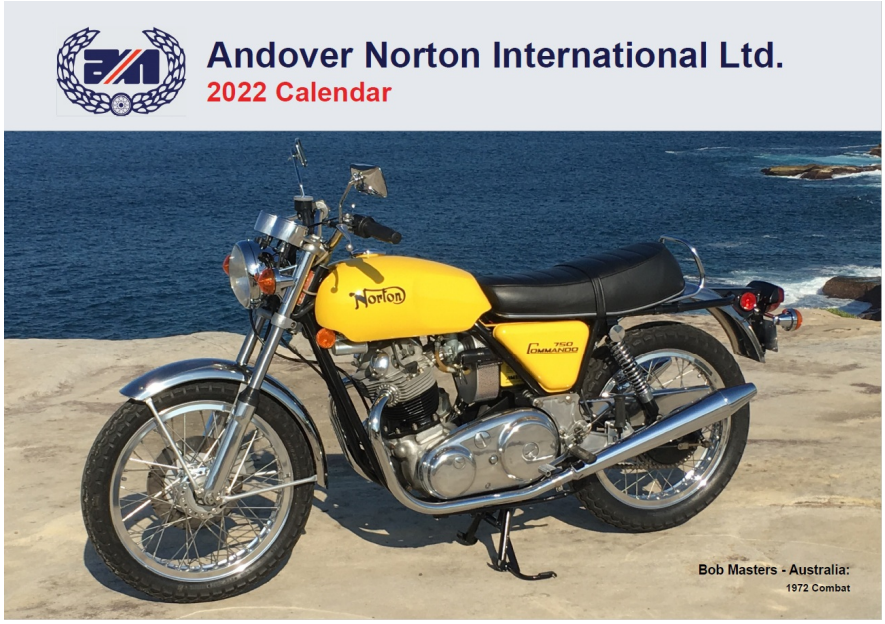
From left to right: GPM standard 750, Wiseco standard piston, Omega (forged) and the Wiseco AMA type piston.

The second photo shows the 850 Omega compared with the Wiseco.

The forged Omega including rings, pin and circlips is actually lighter than the standard GPM piston. Omega have confirmed that they never made a forged Norton Commando piston, other than what they have made for us. The pistons used in the 70's were cast not forged.

We approached them to make forged pistons and it was decided to make a new forging tool that worked with the final piston design. Both slipper and semi slipper were considered but Omega advised against this for several reasons.

Joe adds: The crown on our Omegas was drawn to give it more squish effect than the Wiseco AMAs have. One thing the Commando shortstroke racers did not have was squish heads. I still wonder what drove the designer of the day to make the combustion chamber a simple hemisphere.



There is still plenty of time to get your Andover Norton Calendar ready for next year!

Shop

That's all for this edition of “The Source”!
Until next time!
The Team at Andover Norton.

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