

# VIRUSCAST 2

**Being the Northumbria Nortons Bananavirus Newsletter,**

## **Viruscast: Second Issue**

**This is STILL the big chance to get into your sheds and Fettle! Fettle! Fettle! – then write all about it and send it to your scribe!!!**

**In which spirit – here we are definitely getting right technical - with -**

**A contribution from Derek Turnbull –**

### **Norton Commando AMC Gearbox** **A painful education!**

*‘When you have eliminated the impossible, whatever remains, however improbable, must be the truth?’*  
*Sherlock Holmes in ‘The Sign of the Four’*

I’ll admit it. I fell off the Commando last year. Thankfully, it was at low speed and the damage was minimal. At the time I thought I may have skidded on gravel, but a little doubt gnawed away at me. While I was repairing the accident damage I found a ‘sticky’ gearchange and problems in the gearbox, which makes me think now that the transmission seized, locked the back wheel and dumped me on the tarmac.

When I stripped the ‘box I found the remains of the sleeve gear bushes in the sump, a bent camplate, chipped teeth on the mainshaft 2<sup>nd</sup> gear and a layshaft 3<sup>rd</sup> gear with 21 teeth instead of 20. When I pulled the box from the frame, I found that the spacer was missing from the top mounting lug and the gearbox shell was stamped with two numbers, 040122 and N399. Hmmm!



The Associated Motor Cycles (AMC) 4-speed gearbox came about as a rationalization project following AMC's acquisition of Norton in 1953, and was used, in various build standards, on AJS, Norton and Matchless bikes from 1956 up to the last Norton Commando.

I've learned:

1. Gearboxes stamped N### were built for Norton from 1957 – 1962;
2. Gearboxes stamped NA### were built for Norton from 1963 – 1968;
3. Gearboxes stamped M### were for Matchless;
4. Commando boxes had the engine number stamped on them, starting in 1968;
5. 040122 is a casting number, not a part number;
6. The top and bottom mounting lugs on pre-Commando gearbox shells are both 3.1/4" wide;
7. The top mounting lug on a Commando gearbox shell is 3.3/16" wide, to enable fitting in the Commando cradle - hence the need for a spacer when fitting the upper mounting bolt;
8. The Norton Workshop Manual for the 850 Electric Start is wrong. There is no need to *remove crankcase to engine plate bolts* or *remove the rear wheel* and *force the rear engine mounting rearwards* to remove the gearbox (Section D7);
9. The gearbox main shell has been beefed up on a number of occasions and the Commando shell (P/N 06.5207) is 8oz heavier than the early N### shells;
10. My wallet is an awful lot lighter following a full gearbox rebuild.



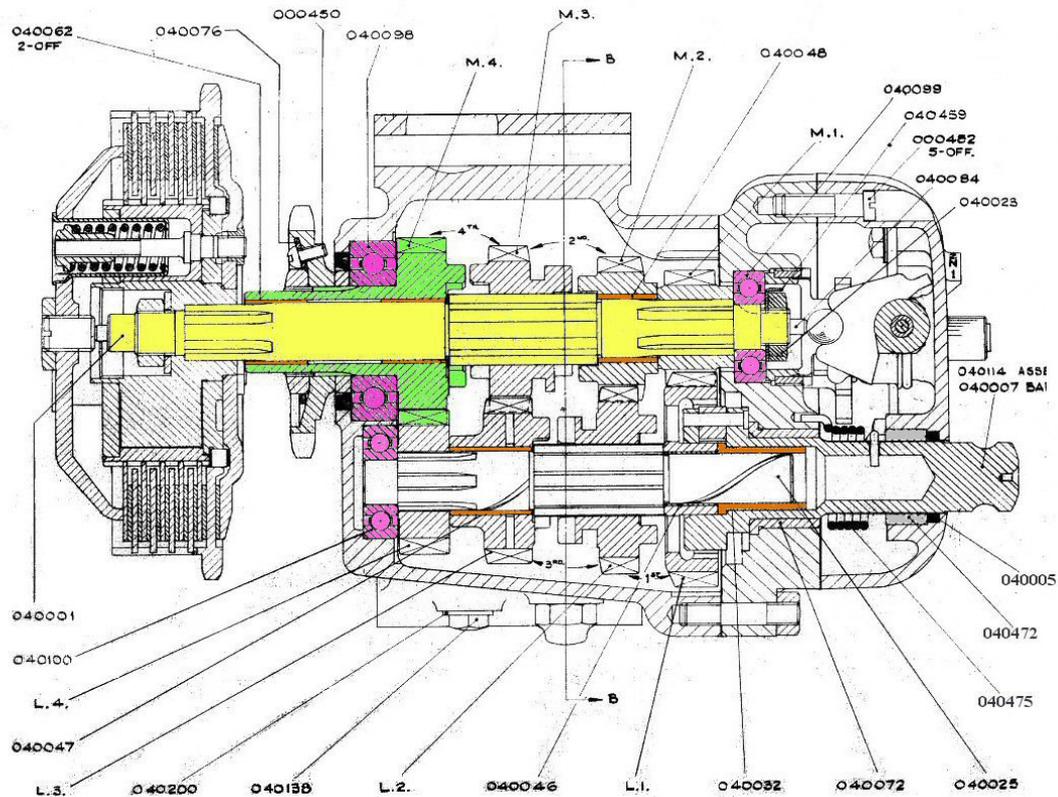
*New gearbox shell on left – note thicker wall sections & changes to casting radii*

I've concluded:

1. In the past, some joker has modified an early (possibly Dominator) gearbox shell and fitted it to my Commando;

2. The modifications included fitting Commando inner and outer covers (crossover gearchange), and drilling and tapping a hole for the neutral indicator switch;
3. The Commando power output is greater than the earlier gearbox shell was designed for, which may have caused the shell to flex and internal components to move and fail;
4. You cannot fit earlier gearbox components to later bikes – and survive;
5. Commando owners are characterized by their twin virtues of patience and poverty!

Finally, here's a nice cross section drawing of a pre-Commando AMC gearbox I came across:



After becoming dizzy with this intense technology, I think we are all entitled to some light relief – so here's some happy nostalgia, from Dave Twinn -

## My Long Lost Dommie

### 1967

After owning a Tiger Cub then a BSA C15, I passed my test at seventeen and decided to get my first big bike. This came from a man from Stanley who had bought a new 600cc Norton Dominator from Harry Woods of Morpeth. He had only rode it for two years then had an accident which laid up the Dommie in his shed for a further six years with only 9,000 miles on the clock. I, well my dad, paid £50 for it and transported it back to the wilds of West Rainton. With a charged battery it started second kick. Off came the non racing panniers and the silencers were replaced by Dunstall Megas. Those days I went as fast as I could and raced anything in sight. It got well polished but well hammered. With twin carbs and excellent acceleration I went through several back chains. Like nearly all Bikers those days it was an essential part of transport and therefore used every day and every winter.

### 1976

However circumstances changed and wine, women and song (pubs) came along and the Dommie became neglected. Ted Richardson from Pelton, a respected classic bike restorer and a smashing bloke



offered me £250. The Dommie with 36,000 on the clock went Pelton and I could afford my honeymoon in Spain.

Maybe I was changing silencers

## 2006

30 years after its sale, married with two adult children, I often wondered what happened to the Dommie. Was it still in existence or even in this country? So one Saturday I chased up Ted Richardson who informed me that he had immediately part exchanged it to an elderly Collector, Alan Burden, who lived somewhere in Weardale. On the following Wednesday after some detective work and abuse of my works time, I found Alan who was obviously very cautious of me. He told me he had given it conditionally to his nephew David Knotts who lived on the outskirts of Newcastle. He was not to sell it before he restored it. I pleaded with him for his number and two hours later I was sitting on the Dommie. It was a rust bucket barely recognisable. So after 30 years and a five day search I had found my old Dommie. I was the last to ride it and it still had 36,000 on the clock.

## 2013

Seven years after meeting David Knotts and out of the blue I got a call from him saying he had restored the Dommie to showroom condition. He said that he was about to advertise it when he had coincidentally found my telephone number. Although gutted it had been restored, I was (for the first time in my life) in a position to buy it. He wanted £9,000 for it and I got it for £7,800. Rather high but what price sentiment.



For the first year whilst I was busy on my house refurbishment. I rarely rode it. It was winter time so on a night I sat in my shed just looking at it in amazement. A bit like someone admiring a stolen Rembrandt.

## **NOC Records and its Refurb**

Dispatched from the Norton factory at Bracebridge Street, Birmingham, 10th December 1957 to St Andrews Motors, Newcastle upon Tyne. However, the bike wasn't registered new until 18th April 1959 by Harry Wood Ltd of Morpeth.

It may have been used as a showroom model as it was the first of the new alternator/coil ignition equipped bikes. Options fitted were fully enclosed rear chain case, twin carbs and larger inlet valves.

David K fitted a concentric carb instead of the original twin monoblocs, high compression pistons, 'SS' camshaft, converted it to 12 volt electrics with a modern alternator and solid state cut-out/regulator, flashing indicators, halogen headlamp bulb and LED taillight.

So thanks to the Northumbrian Branch of NOC, Durham Classic Motorcycle Club and my mate George I am riding it and keeping it on the road.

Cheers,  
Dave Twinn.

### **And now, just to keep you amused – a little game:**

**Guess; Make. Model and Year** and send the answers to Simon wrapped in grease-proof virus-free paper. Address etc are at the end ---



## **And – seeing Dave is entitled to get nostalgic, here’s my first bike –**

We were living near Shaftesbury in Dorset. I was returned from South Africa only about 2 years back, and my elder brother had stayed on to go to Uni in Cape Town.

There, elder brother had reached an age when he inevitably got involved in restoring old bangers, these being the only kind of banger the young could afford. But he came to visit us in Shaftesbury. I was 16, and, also inevitably, I had started to go on about motorbikes. Well, somehow mother went weak at the knees and, without involving anyone who knew anything about motorcycles, or telling me, she went with my brother (who thought he understood bangers) and came back with what was supposed to be a motorcycle, for which she had paid a heap of money, but was a few boxes of junk (and I hope the dealer who sold it to her is now roasting in Hell). The various bits could, allegedly, be combined to produce a 125cc Royal Enfield. This was ultimately achieved – after having tried out what were sometimes 3 examples of particular components, all knackered to various degrees. But it went (just). Admittedly I think our knowledge of setting things like timing etc was not of the best. But, yes, it went. It went with a loud clattering noise. Enfield, in their wisdom, had made the flywheel of the flywheel magneto out of a soft, lead-like material, and riveted it onto the boss. Inevitably the rivet holes wore oval so the flywheel could happily flap around, and bang against the electric coils inside. Had I known then what I know now, I would have known how to fix this, but I did not, so I jumped on top and headed for North Cumberland where some highly eccentric, highly intelligent and totally inspirational aunts lived running a financially catastrophic small-holding.

I also NEEDED the North. After South Africa I found Dorset, with all the tiny lanes, villages, thatched cottages, moo-cows, more villages, thatched cottages, moo-cows etc – totally claustrophobic. Almost nauseatingly, stomach-churningly pretty. I needed BIG SPACES like the Africa I had left.

And the eccentric, intelligent etc aunts could be sponged off as a base to go and visit SPACE in the form of Northern Fells.

There were no motorways. You went (rattle-rattle), via Warminster, Melksham, Chippenham, Malmesbury, Tetbury, Stroud, Gloucester, Ledbury, Leominster, Ludlow, Church Stretton, Oswestry, and then a good rattle into Llangollen. Here my dad’s infinitely rich cousin Sydney lived, in a small palace, and, when you are 16, the older generation exists to be sponged off, does it not?

So after a night in the palace, off again (rattle-rattle) – Wrexham, Chester, Weaverham, Warrington, Wigan, Preston, Lancaster, Kendal, and then, with my face in the exhaust of lorries even slower than me, up over Shap, to Penrith and then, cross- country, with the rattle now a deafening clatter, to said aunts, near Wigton.

It was a one-way journey. It had no choice. At least for the Enfield,. So that was the end of the dreadful Enfield. I have one faded picture of it, together with elder brother.

But it did not put me off bikes. (And I wonder, watching modern 16-year olds sitting doing nothing but playing computer games, whether they would be capable of getting even a mile on a rattling 125cc Enfield.) Here it is – note hand gear change.



**Some less happy news** – the word reached Simon that Stuart Heslop’s house was invaded by a burglar who beat him up so badly he had to go to hospital. Simon has tried to get news via local papers and third parties, but, as we are all locked up and see nothing much of each other, news travels very badly. Stuart – you are on the list for this Viruscast. Our sympathy – even horror. Do let us know how you are getting on - - -

Simon has suggested I do a history of all the dates and places where the Dommi went wrong. (What is called on-the-road maintenance). But that would be a very long list, and I think this Viruscast is long enough.

***Stay well. AND DID YOU PAY YOUR SUBSCRIPTIONS?????!!!!***

*Officers - - -*

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