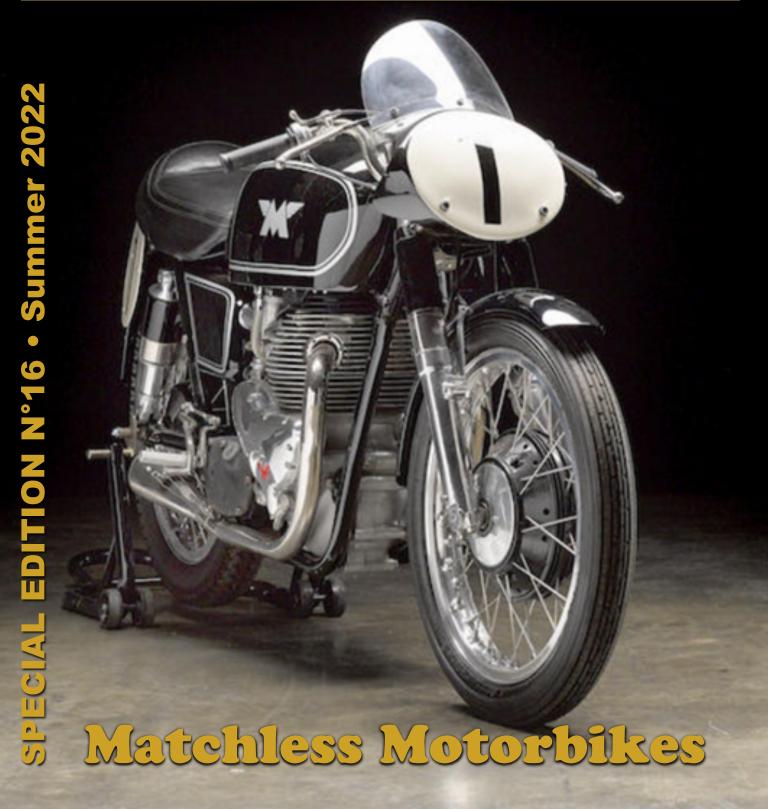


LA ROUTE A JAMAIS - RIDE TILL YOU CAN'T - DER WEG IST DAS ZIEL



VANITAGE

A motorcycle publication for the motorcyclist enthusiast.

EDITOR Pat Castel vintage.motorcycle.news@gmail.com

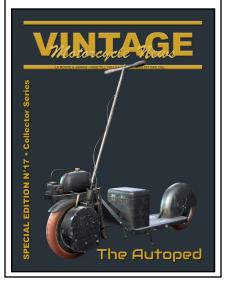
> COVER PAGE THE MATCHLESS G45

Notice

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NEXT EDITION

This fascinating machine represents the world's first model of scooter. It was the only motorcycle to be built in New York City. il was also used by New York gang members for easy getaways.



FROM THE EDITOR'S DESK



Life is not always what we expect it to be. I never thought that one day I would be caught, trapped in my car, in a freak wind storm. I knew better when I saw those live wires around me. Stay cool, do not touch the metal parts and wait for help. As long as I would stay in my car, I was safe... Somehow my school time came back to me in a flash and I

remembered vividly the experiment we made about the Faraday cage. This storm brought a lot of damage to Ottawa as well as Ontario, and the clean up we had to go thru was unbelievable. In short, this why the newsletter is late...

Tomorrow is not promise to anyone like my wife would say. It is now official, I am a pedestrian or car user I must say. My beloved bike was sold. Do not worry, I will remain the editor of the newsletter. I am not planning to retire from this post. Occasionally, you might still see me with my tent on rallies, alas on 4 wheels.

Till I saw it going out of the garage ridden by another fellow, I never realized the hurt I would be going thru. All my canadian bikes were bought new but this one, I kept it for 21 years, I gave it a name (Snoopy), it became part of me. It is crazy how people can get attached to some metal and plastic put together.

Down, I am of course because it defines the end of an era. A time when I could go on long journeys agremented by motorcycle events and camping with friends. These moments are gone but will never be forgotten.

Am I going to get back on 2 wheels, probably not. If I had to sale my bike it was because of a bad shoulder injury. I am apparently too old for it to be fixed or repaired. I could of course buy a smaller bike, easier to handle but it would be like a nag. Honestly in my condition, if I get back on 2 wheels, it will be on a scooter, the BMW type not the next door kid's toy.

The pandemic brought also a lot of pain amongst us, the fact that we lost these last two years of not riding but also the worse part of it, was the loss of some dear friends that we will never see again. Life sucks...

Till next time... Ed.



AJS Matchless Lightweight Single Repair Do It Yourself by IFIXIT

www.ifixit.com/Device/AJS_Matchless_Lightweight_Single



AJS/Matchless Lightweight fitting Boyer Bransden electronic ignition

The Wipac ignition system fitted to Lightweights can be improved with a bit of modern technology. While the standard system is OK when in perfect working order, the advance/retard mechanism is prone to wear, replacement points are expensive and the timing seems to flutter all over the place. This leads to erratic idle and poor high-speed performance. The solution is to fit an electronic ignition system that eliminates the points and mechanical advance/retard.

Boyer Bransden make a very neat electronic ignition system for classic motorcycles. This guide describes first how convert an AJS/Matchless Lightweight to 12V and then fit a Boyer Bransden ignition system.

erate

<u>Assessment</u>

Difficulty	Modera
Working Steps	13
Time required	4hours

<u>Tools needed</u>

- Flathead screwdriver
- Soldering iron
- 1/2" Ratchet socket Extension Set



AJS/Matchless Lightweight Gearbox Overhaul

This guide will show you how to remove, dismantle and overhaul the gearbox from a 250cc AJS Model 14 / Matchless G2 or a 350cc AJS Model 8 / Matchless G5 motorcycle (all years).

You will need a decent set of tools and plenty of patience. Note that parts for Lightweight gearboxes can be very tricky to find. Although they were made in large numbers, there are lots of subtle variations that can make finding the correct part quite difficult. If you get stuck, remember that the Norton Lightweight shares some of the gearbox internals and these can be a useful source of parts.

Assessment

DifficultyModerateWorking Steps28Time required6hours

Tools needed

- Set of Whitworth spanners
- Set of Whitworth sockets
- Flathead Screwdriver
- AMC clutch extractor tool
- C-spanner
- 38mm deep socket
- Impact Driver

AJS/Matchless Lightweight Gearbox Removal

This guide will show you how to remove the gearbox from a 250cc AJS Model 14 / Matchless G2 or a 350cc AJS Model 8 / Matchless G5 motorcycle (all years).

You will need a set of Whitworth spanners or sockets and a decent flat-bladed screwdriver.

Note that the bike featured in this guide has a few modifications from standard, so your bike may look a little different in places. The basic technique remains the same, regardless of which model of Lightweight you have.

Assessment

Difficulty	Moderate
Working Steps	8
Time required	1hour

Tools needed

- Set of Whitworth spanners
- Set of Whitworth sockets
- Flathead Screwdriver
- AMC clutch extractor tool

1905 Matchless 2 ½ hp



Key facts

- Year: 1905
- Country: Great Britain
- Capacity: 327cc
- Cylinders: 1
- Valves: side valve
- Performance: 30mph/48.28kph
- Price new: £50
- Owner: National Motor Museum Trust
- Manufacturer: H.A. Collier and Sons Ltd

Matchless were one of the most famous names in the British motorcycle industry. Like many others they grew from the bicycle trade, producing their first motorcycle in 1899. For many years the company used proprietary engines, JAP in this case, producing their own from 1924. This is a typical motorcycle of the period which clearly shows its bicycle origins.

Henry Collier started producing bicycles under the Matchless name in the 1890s. His sons Charles and Harry began experimenting with engines in 1899 with the first production Matchless motorcycles appearing in 1902, powered by an MMC engine. Charles won the single cylinder class in first Isle of man TT in 1907. Matchless became an established name and made an unsuccessful attempt at producing cars in the 1920s. Matchless absorbed AJS in 1931and became Associated Motorcycles in 1938.

1916 Matchless Horizontally-Opposed Twin

Sources: The Motor Cycle, November 16th, 1916. pp 429-432 The Motor Cycle, Bob McGrath (Australia), Sergio Scaliandri (Argentina) and our friends at ManxNorton.com

Years ahead of its time, Harry Collier's machine had swinging arm rear suspension and a beautifully designed 732cc HO engine.

The ravages of the Great War prevented production for some years and when released it had a more powerful powerplant.

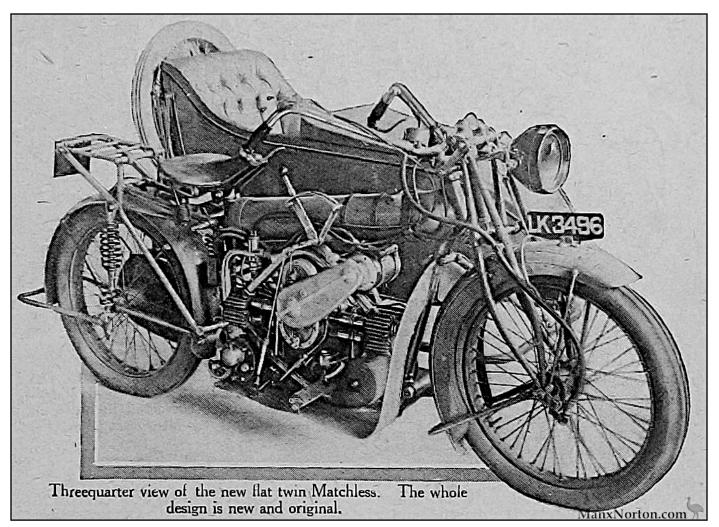
Known as the Model H Matchless they remained on sale up until the late 1920's - in the last few years only to special order. They were fitted with a variety of proprietary vee-twin engines including JAP.

1916 Matchless Model H Flat Twin (prototype) by Sergio Scalerandi

During the First World War Matchless did not receive army contracts to manufacture motorcycles and as the production for civilian use was almost null it seems that the Collier brothers had plenty of free time which allowed them to design a new model.

The HO twin was one of the first to have its own engine, previous models always using the Swiss MAG or English JAP. At the end of 1916 Matchless presented the Model H especially suitable for use with sidecar. Following the trend of the competitors of the time, the engine was a two-cylinder "boxer" side valve of 732cc. ($70 \times 95 \text{ mm}$) placed longitudinally in the frame. It had a large external 12in. wheel, the cylinders could be removed without having to remove the engine from the frame and the pistons were made of aluminium, a rare and advanced feature at the time.

The transmission was by chain with three speed gearbox integral with



the motor. Both chain covers were totally closed.

Another peculiarity was the rear suspension system with springs, similar in concept to the plunger system widely used some four decades later. The sidecar also had suspension and was affixed to the frame of the motorcycle at some six points allowing the whole set to move in unison.

The fuel tank, with a capacity of two gallons, was tubular and formed the upper part of the frame, echoing the appearance of their high-profile their racing machines.

The rest of the bike was more conventional, using magneto CAV, carburetor AMAC (placed in an extremely long intake tube) and Dynamo and Lucas lighting system.

In a test done by "The Motorcycle" they highlighted that the engine developed a lot of power, had a wide acceleration and had no vibrations but was excessively noisy.

The Matchless factory promoted it for a few months offering it as available after the end of the First World War, but in mid-1917 and after "several months of testing, the Collier brothers decided that for use with sidecar, where a good speed is desirable average and for hill climb, you need a bigger engine".

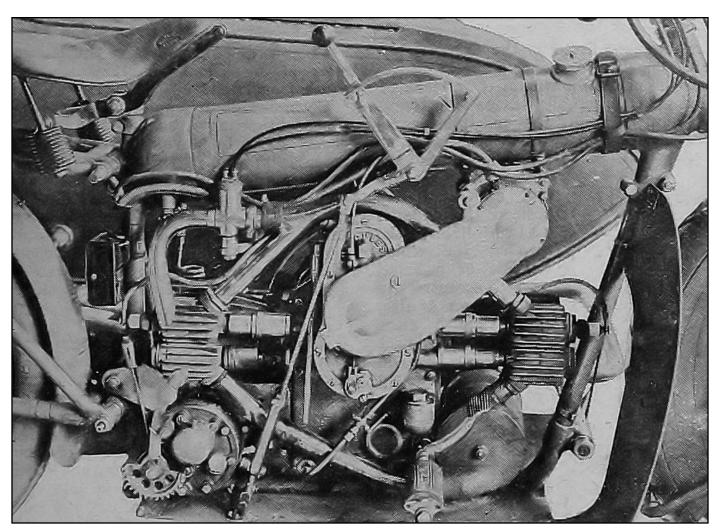
So it was that when the production of civil motorcycles resumed after the war, Matchless developed the Model H with JAP V twin engine as it was widely known in the post war period and launched in 1920.

THE 5-6 h.p. FLAT TWIN MATCHLESS

70 mm. X 93 mm., 732 c.c., Three Speeds, all wheels sprung.

FEW members of the motor cycle business deserve greater success than H. Collier and Sons, Ltd.

Since 1903 the two sons have devoted their lives to the movement, and, by engaging in many competitions and races, have sought to evolve the perfect motor cycle. Having known both Charlie and Harry Collier for the past thirteen years, we have watched the progress they have made in the design of their machine, and have always admired their devotion to their business, which was also their



pleasure. In the early days they engaged almost entirely in speed work on the track, and it was while occupied in this that they obtained their wonderful practical knowledge of the motor cycle engine. This knowledge has stood them in good stead, and has been of undoubted value to them in designing their own engine.

Although for many years they assembled their machines and bought their engines from outside firms, they were by no means ignorant of engine design, and considerably altered for the better many of the engines built up into their machines. Now, for the first time, they have designed their own motor, and a very successful production it is. Being absolutely up-to-date in their ideas, they have evolved a 5-6 h.p. flat twin embodying the very latest practice in motor cycle engine design. Furthermore, being cognisant of the magnificent future for British motor cycles in the Overseas Dominions, they have placed upon the market a well-tried and thoroughly efficient spring frame, while not only has the absence of vibration of the flat twin led them to adopt this form of design (??), but also the fact that the ground clearance is much greater than is possible in the case of the V type engine, the actual clearance being $5 \ 1/2$ in. This is a point which will be much appreciated by Overseas customers.

The frame is a total departure from the firm's standard practice. In the first place, the tubular tank of steel, containing two gallons of petrol, forms the top member of the frame, and has a slight upward slope towards the head. The down tube forms a sort of, loop, and acts as a support for the engine. The spring forks have been somewhat improved in design, the lower pair of links being now inside the main members of the forks, which are wide enough to allow the mud-guard to form a perfect sweep from the front of the extension right down to the back.

The system employed in the springing of the rear portion of the frame was clearly indicated in the issue of October 21st, 1915, page 401, and this has only undergone slight improvements in detail. The method adopted is to interpose coil springs between the movable rear forks and the rigid portion supporting the rear carrier. All moving parts, both on the front forks and the rear springing system, are provided with grease cups. These, however, will not be retained. Instead, a grease gun will be supplied, having a screw-on end, and on the dust caps taking the place of the grease cups, being removed, the nozzle of the grease gun may be screwed on to the hollow spindle, and the grease injected. This is much less trouble than the filling of numerous grease cups, one grease gun full being probably sufficient for all the points requiring attention.

The Power Unit.

The question of accessibility has been carefully studied in the design of the new Matchless engine arrangement, which is so carried out that the cylinders may be removed without taking the engine out of the frame. The radiating fins run longitudinally down the cylinders and taper towards' their

base. The cylinders are off-set to the amount of one inch. Both valves are horizontal and are arranged at the side in an accessible position, telescopic valve spring cams being employed which exclude all grit from the interior working parts of the valve system. Of the two portions of the valve spring cover the larger screws on to a ring surrounding the base of the tappet guide, and when it is found necessary to replace a valve it is unscrewed and slipped back, thus exposing the end of the valve stem and cotter. The valve gear is exceedingly simple and interesting, only three pinions being employed, while one set of cams actuates both inlet and exhaust valves.

The Lubrication System.

A plunger pump actuated by one of the valve cams delivers the oil to two passages cast in the crank case, which lead direct to the main bearings ; that is to say, the oil enters the bearings at both sides, the crankshaft is hollow and the lubricant is driven under pressure through it and exudes at the big end bearings, all excess returning to the sump. At the base of the sump whence the oil is delivered there is a large gauze which adequately filters it from all impurities. The system has been found to be most successful, and since the oil is delivered under pressure it is bound to reach those parts which need copious lubrication. A window has been let into the crank case just below the filling orifice which indicates the level of the oil in the sump.

Induction and Exhaust.

The arrangement of the carburetter is somewhat unconventional, the inlet pipe forming a complete bow, passing from one cylinder over the top of the timing gear case to the other, but near the top of the arc of the bow there is a branch pipe to which the Amac carburetter is attached. Long experience with motor cycle engines has made the brothers Collier realise the fact that it is always beneficial to take the air in warm if possible, no matter whether pure petrol or a petrol s u b s t i t u t e b e u s e d ; consequently a warm air pipe is fitted to the main air intake

The design of the exhaust pipes is also worthy of note, the pipe from the rear cylinder entering the bottom of the expansion chamber, while the exhaust gases from the front cylinder issue through a short pipe into the top of the expansion chamber, the final exit being through a long pipe on the near side of the machine.

At first the designers were troubled with a fault which is common to flat twins, namely, a "ring" in the flywheel, and this they have corrected in quite an ingenious manner by interposing between the periphery and the flywheel boss a disc of three-ply wood securely bolted up to the face of the flywheel, and this effectually deadens the noise.

Ignition.

The magneto fitted is the C.A.V., the advance spark lever being actually on the contact breaker and within easy reach of the driver. In actual practice it is found that the position of the spark lever requires practically no alteration. At the bottom of the timing case will be noticed the exhaust valve lifter, the crank for which consists of a small pin eccentrically mounted on a disc, which has a piece cut out of the lower portion, so that on the valve being dropped the indentation rests against one of the studs holding on the timing case cover. The exhaust lifter is of the double cam variety, the two cams actuating the exhaust rockers.

An interesting experiment is the fitting of aluminium alloy pistons, which, so far have given every satisfaction.

Transmission.

In the new Matchless the circular type of gear box is retained, but owing to a slight modification of the design of the teeth, which enables the gear wheels to be made lighter, the new gear box is of rather smaller dimensions than previously. It is carried in two plates, extending from the crank case to the bottom bracket lug, and is held in position by two steel straps. To adjust the front chain the two nuts at the ends of these straps are loosened, and by applying a special spanner to two of the lower nuts in the gear box the whole may be rotated, thus enabling any slack to be taken up

It will be noticed that the Lucas dynamo is driven by a chain off the camshaft, and is carried in a bracket suspended from the tank, the chain being neatly enclosed in an aluminium case.

The clutch consists of two steel plates, hardened and ground, engaging with a central plate of cast iron forming part of the sprocket. An arrangement has been made so that, in the event of the machine being used as a solo mount, the clutch may be controlled by means of a Bowden wire from the handle-bar. The lubrication of the clutch is provided for by a branch pipe from the oiling system. From engine to gear box the transmission is by silent chain, which is, of course, enclosed.

Considerable ingenuity has been displayed in arranging so that the rear chain cover is free to move with the lower and movable portion of the spring frame.

The mudguarding has been particularly well carried out, while an additional mudshield is fitted to the down tube, and is arranged so as not to impede the cooling. This is continued below the power unit, and acts as an efficient undershield.

The Sidecar.

The same system of springing as is employed in the rear of the machine has been adapted to the sidecar, inasmuch as both the wheel and also the sidecar body are sprung on coil springs. The form of staying at the rear of the sidecar frame is interesting. This consists of double tubes attached to the uprights forming a portion of the motor bicycle frame. This arrangement enables both the sidecar wheel and the rear wheel of the motor bicycle to move more or less in unison, therefore the fault present in many combinations in which the sidecar wheel is sprung, namely, that of instability and a tendency to lean when turning corners to the left, is entirely absent. The side-car wheel is also provided with a stand, similar in design to that employed in the front wheel. The sidecar is well sprung and luxuriously upholstered, while at the back thereof is carried the spare wheel and also an efficient luggage carrier. It will be noticed that both the luggage platforms on the new Matchless are on sprung portions of the machine, which is distinctly an advantage.

The Machine on the Road.

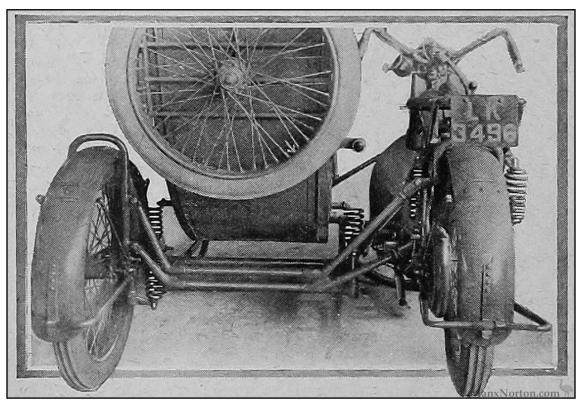
We were next taken for a short run in the district round Woolwich, which is decidedly hilly. The first turning to the right past the works brought us on to quite an appreciable gradient, which the engine took comfortably on top speed, mounting up gradually until we reached Woolwich Common. We noticed that the sidecar was exceedingly well sprung, though Mr. Harry Collier assured us that he was not satisfied as to this point, affirming that the rider was more comfortable on the machine than in the side-car. The roads were certainly rough in this locality, and personally we could find no fault whatsoever. The engine developed plenty of power, but seemed a trifle noisy, a fault which Mr. Collier readily acknowledged. Hitherto his efforts had been to obtain the maximum power for the

engine, and he admitted that it required still further taming down both as regards the noise of the engine and of the exhaust, though with the latter little fault could be found.

On Woolwich Common we took control of the machine and drove for some considerable distance. Having driven a 1915 Matchless not long previously we soon became accustomed to the driving of the new mount. The engine possessed an ample degree of acceleration and was quite free from vibration, the clutch took up. the load sweetly, and the gears went into engagement without a sound. The comfort of the spring frame was most noticeable on the rough road across the Common, which eventually brought us into Shooters Hill. A considerable amount of traffic was met, but the engine proved itself flexible, and we felt quite at home in negotiating it. On reaching Shooters Hill Road we found the surface distinctly good, though a little wavy in places, but the machine rode over the waves with an exhilarating and swinging motion which was delightfully comfortable. Having slowed up for the cross-roads at the foot of the hill we were practically brought to a complete standstill through a boy who saw fit to dismount from his bicycle and hold a conversation with a carter in the middle of the road. This necessitated a change down to second and reduced the

speed of the machine to about four miles an hour. On opening the throttle it immediately picked up and the top was engaged, but not before we were well on to the gradient. However, the engine rapidly accelerated on top until just near the crest of the hill, passing over the summit still in top speed and with the engine not labouring in the slightest degree. We noticed that considerable improvement has been made in the design of the handle-bars, these being much wider than on the previous model. Altogether, the run on the new Matchless was a delightful experience, and we greatly look forward to a closer acquaintance with this machine on the road at no very distant date.

It must be distinctly understood that Messrs. Collier and Sons are not in a position to deliver any machines. This is merely the prototype of their post-war model, which they hope to deliver to the public very shortly after the cessation of hostilities.



The Great War



The Great War

MATCHLESS-VICKERS MILITARY MOTORCYCLE

The idea of taking a motorcycle and attaching a machine gun to it seems to have occurred to someone very shortly after the motorcycle was first invented. The benefits of a mobile machine gun are fairly obvious, especially when you throw in the additional capabilities of a motorcycle.

The First World War was the first significant conflict to see the use of these three-wheeled guns, and they proved highly effective – earning themselves a place in the arsenal of every major country in the world. As WWI progressed, other nations with little to no local motorcycle manufacturing industry started placing sizeable orders for military-equipped bikes from the Brits. The largest of these orders came from Russia, right up until the revolution saw the country pull-out of the Great War in 1917.

This unexpected withdrawal left thousands of brand-new bikes sitting in storage on Russian docks, and by the end of the war in 1918 the companies who had built them began buying them back to help fulfil the rampant demand for motorised transportation in their local market.

The Matchless-Vickers you see here is one of these rare Russian-ordered bikes, it's powered by an 8hp JAP V-twin, and it has its original sidecar fitted with a 1/4 inch steel plate along the front and a Vickers machine gun on a swivel mount.

It has been restored to original specification.

by Ben Branch

0.H.M.S

THE MATCHLESS COLLIERS

The old AJS and Matchless marques, aka Associated Motorcycles, have an extensive and illustrious history which dates back to the turn of the 20th century. This book focuses on the founding family of the Matchless brand, the Colliers, and tells their story as seen by an insider's eye. It's not a formal history but instead a personal retrospective which reveals much about the original British bike industry and the men involved in the glory days of mass manufacturing motorcycles...

Bill Cakebread is well known within AMC circles for his outstanding first book 'Motorcycle Apprentice - Matchless in Name and Reputation'. He deserves to be better known outside those circles as his writing is excellent and draws in both the expert and those outside the passion. Bill worked at Associated Motor Cycles Ltd from leaving school in 1958, eventually rising to become assistant to their chief engineer, Charles Udall, and chief designer Horace Watson. He was with the factory until its ignominious end in 1969. One of his first tasks at AMC was to destroy all of the spares for the Porcupine racer. If they knew then...

Bill is well qualified to tell a good tale, which is precisely what he does in this book. Right from the start he captivates the reader. The book's introduction neatly sums up the appeal of motorcycling, possibly more succinctly than I have ever seen before. The theme is the Collier family but the volume covers the production of the first Matchless in 1902 and goes up to the end of trading. It is a fairly slim book at 118 pages but it certainly packs a lot into them.

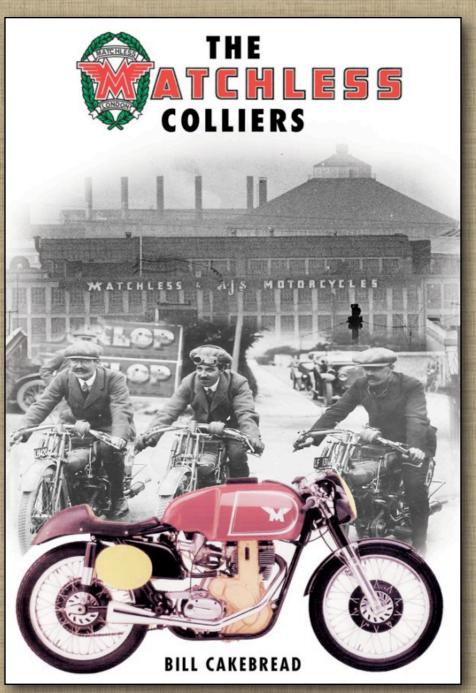
Clearly an enormous amount of research has been done by Bill. This has been augmented by a lot of input from surviving members of the Matchless founding family, the Colliers themselves.

There is a lot of the early family history of the Colliers, much of it

13

new material. It is an enchanting story of the Collier family and brings them vividly to life.

The Matchless Colliers, by Bill Cakebread, can be ordered direct from the author for £14.50 plus shipping: WA Cakebread, The Paddock, High Street, Ninfield, Battle, TN33 9JR





Matchless Silver Arrow motorcycle, years of production: 1929-1933.V-twin engine 397cc (24ci), power 16HP at 5000rpm, weight 140kg, top speed 105 km/h (65mph). Of the 1700 odd machines produced only about 40 are known to have survived.





Vintage Motorcycle News

IB VESTERGAARD TOMMERUP - DENMARK



A few years before the WWII, the Brough Superior company has suddenly switched from JAP to Matchless engines. Matchless was one of the earliest manufacturers of engines and a competitor to JAP. A flathead double-cylinder engine with 1000 cc displacement was chosen for the Brough Superior SS80 model, and the overhead engine – for the SS100. It is interesting that Matchless offered an own-produced motorcycle equipped with the same engine model. The price tag of a Brough Superior SS80 stated "£90", and a Matchless Model X went at £60.

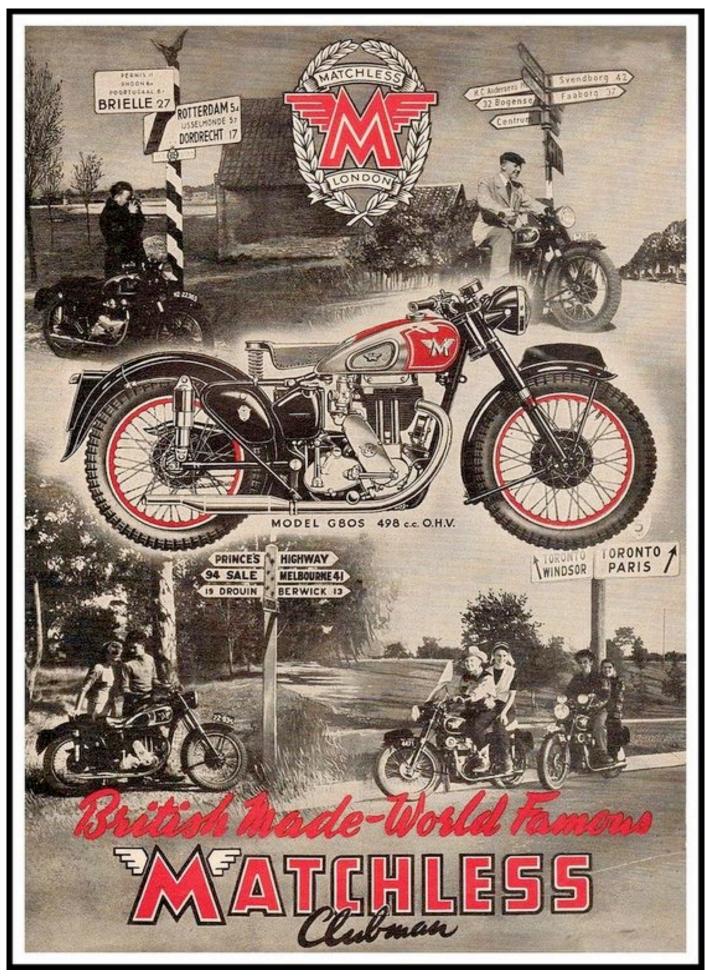
In fact, the Matchless company was famous for its big twins since World War I. For a long time, Matchless motorcycles had been equipped with MAG or JAP engines. In 1923, Matchless has released the M/3S model equipped with an own-produced double-cylinder engine. By 1929, the family of the Matchless motorcycles had only original V-engines.

When Matchless refused to equip its motorcycles with third-party engines, it led to the creation of a remarkable engine. It was a 982 cc double-cylinder engine with a cylinder angle of 50 degrees. The capacity was 20 h.p. at 4,000 rpm. The first machine that got this engine was model X announced in 1929. In the very first advertising catalog, this machine was described as "the most beautiful motorcycle on the roads of Britain, with its branded double silencer and an elegant black and white petrol tank". In addition, Matchless released a sports model – X/R. It had an increased capacity of 26 h.p., an increased compression ratio (from 4.4:1 to 4.8:1), and nickel-plated cylinders.

In 1930, the sport model was upgraded (it got chrome-plated rims and an increased capacity) and got new designations – X/2 and X/R2. One year later, in 1931, sports models got X/3 and X/R3 prefixes. These models had a petrol tank of a new type and a four-speed gearbox.

Meanwhile, the Wall Street Crash of 1929 traveled halfway around the world and reached Great Britain. At that moment, Matchless has been actively promoting its new four-cylinder flagship, the Silver Hawk. Because of the bad economic situation, the development of the V-twin family took a backseat but didn't stop.

During the 1930s, motorcycles of the V-twin family have been continuously upgraded. Because of the strong credit standing, Matchless successfully got over the crisis. However, the war made the company to sort out its priorities. As a result, one-cylinder Matchless G3L became one of the most widespread motorcycles of the WWII period. Although model X was itemized in an advertising catalog 1940, only a few machines had left the conveyor in Woolwich. After the war, manufacturing wasn't resumed. So 1940 was the last year of the glorious history of these British V-twins.





1931 MATCHLESS SILVER HAWK

Source: MotoWorld

In December 1929, at an exhibition in the famous Olympia Exposition Center, Matchless presented a sensational new model, Silver Arrow, designed by Charles Collier. The bike had a two-cylinder V-shaped 397 cc engine with such a small angle between the cylinders (18°) that the block and head of the cylinders were made by single castings.

Externally, the engine gave the impression of being inline. The camshaft was perpendicular to the crankshaft rotation axis, so the bottom valves were vertical. The rear wheel had a pendulum suspension: two cylindrical springs and a friction damper were mounted under the seat. The dashboard was above the handlebar.

The Silver Arrow was a good motorcycle but had some flaws as frequent engine overheating, gearbox failure and the motor gave out only 16 hp, which allowed to accelerate only up to 95 km/h. However, the bike was quiet and smooth, for which he was nicknamed the 'whispering wonder', but sales were still pretty low.

The company needed some fresh ideas, so the initiative was taken by Bert Collier Jr., who by that time had already worked in the company together with his older brothers. He decided to refine the bike and as a result, the engine volume was increased to 592 cc, and power was increased to 36 hp. The camshaft was driven by a single shaft (unlike its main competitor, Ariel Square Four, where two shafts were used), all four cylinders were powered by a single Amal carburetor. The three-speed gearbox was replaced by a four-speed gearbox. The top speed limit was raised to 137 km/h.

This new motorcycle was named Silver Hawk, it was the world's first V4 motorcycle with a dry sump. The engine of this model was very unusual. The thing is that at that time all engines with four-cylinder always had an inline design, which increased the wheelbase of the



motorcycle, making it quite cumbersome. The V-shaped four-cylinder engine was a solution to this problem. Thanks to the power of the four cylinders and the compactness of the motor, the Matchless Silver Hawk had a sporty look, which was exactly what Collier had in mind. Another advantage of this model was the soft rear suspension.

The first presentation of the Matchless Silver Hawk took place in London on November 10, 1930 at the Olympia Exposition Center, where it amazed everyone with its innovative design. Considering the fact that two-cylinder motorcycles were very rare in England of the 30s, it becomes clear that any motorcycle that had more than one cylinder was quite prestigious, and a four-cylinder bike was a real luxury. That is why Silver Hawk became the flagship of the company.

In 1931, the serial production of the Silver Hawk began, but it was not the right time for luxury motorcycles. The complexity of its design and, as a result, high price led to low sales. All motorcycles were custom made, that's why Silver Hawk is one of the rarest luxury motorcycles in the world. The previous owner of the motorcycle, Pat Gill, a well-known British collector, and the motorcycle expert, gave the bike to the Motorworld by V. Sheyanov collection. Pat bought the Silver Hawk in the mid-1950s and was the third owner of the bike. When he gave the motorcycle to us it was in excellent condition, but at the time of purchase, the bike looked like a pile of scrap metal. However, Pat noted that most of the parts were in good condition, so he decided to fix it. It took 10 years to find all the missing parts and another 3 years to restore the motorcycle.

The result has exceeded all expectations. For many years Pat Gill with his Matchless Silver Hawk participated in all kinds of races and competitions, winning numerous prizes.

At the British RealClassic Show, in 2011, the bike took 2nd place in the category "Best motorcycle before 1950", and in 2012 the bike won in the category "Best British motorcycle".

In 2013, during the FIVA Retro Motor Rally in Latvia, the motorcycle was awarded by the Finnish Auto Moto Retro magazine as "The most technically interesting model".

MATCHLESS G80CS MARKSMAN

THE FOUR TIME BRITISH 500 MOTOCROSS CHAMPIONSHIP WINNER



The Matchless G80CS was one of the most dominant scrambles and off-road racing motorcycles of the 1950s and early 1960s. Before the arrival of the soon-to be-dominant Husqvarnas and other lightweight two strokes in the 1960s, it was the heavier British four strokes that dominated the world of off-road racing in the United States, Europe, and further afield in places like Australia, South Africa, and New Zealand.

The secret to the success of the Matchless G80CS largely came down to its combination of a good frame and an excellent high-torque single cylinder engine that could handle the exceedingly rough life of the Californian desert racing scene and come back for more.

Matchless developed the G80 series of single cylinder machines in the post WW2 years. Between 1946 and 1948 the model had a rigid rear but in 1949 it received a sprung rear end and the handling was significantly improved as a result, the model name was changed to G80S with the "S" standing for "Suspension".

The Matchless G80CS was introduced in 1951 in "long stroke" form, this was a model specifically designed for the American off-road racing market that had been exploding in popularity after the end of the Second World War. The addition of the "C" to the model name stood for "Competition".

The G80CS was fitted with a modified version of the G80 engine and a four speed transmission inside a tubular steel cradle frame with telescopic shock absorbers up front and twin shock absorbers in the rear. A slew of changes were made to the G80CS including higher performance cams and larger valves, the original engine size of 497cc was maintained and the basic architecture remained the same – a single cylinder with two pushrod actuated overhead valves.

The simplicity of the engine and its toughness won it many fans in the United States, larger twin cylinder machines became increasingly popular in the 1950s and were dominant by the early 1960s but before this time the G80CS won countless races and it took four British 500 Motocross Championships. Matchless would change the frame in 1960 and they offered a 600cc version to try to keep better pace with the 650cc twins, particularly the Triumph TR6C.

Collectors and enthusiasts have remained enamoured with the Matchless G80CS for decades since it left

production in 1966. The punchy single cylinder with its high torque output combined with the model's good handling and relatively low weight has appealed to generations of riders, and thanks to the relatively affordable cost the G80CS is very approachable.

The 1964 Matchless G80CS you see here is a later version that benefits from the many upgrades made to the model over its 1951 to 1966 production run. It's

been carefully restored to original condition with a focus on getting as many of the details correct as possible. It's finished in the classic Matchless color scheme of red, black, and chrome, and it's fitted with period correct scrambles tires ready to take on the desert.

> Images courtesy of Mecum Aricle by Ben Branch from the silodrome.com

Sight Unseen: 1966 Matchless G80CS

Source: motorcycleclassics.com | By Margie Siegal | Photos Nick Cedar

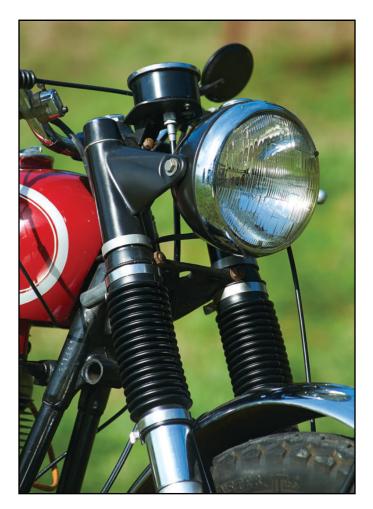
1966 Matchless G80CS

- Engine: 497cc air-cooled OHV 4-stroke single, 86mm x 85.5mm bore and stroke, 8.7:1 compression ratio, 30hp (est.)
- **Top speed**: 90mph (period test)
- Carburetion: Single 3/16in Amal Concentric

- **Transmission**: 4-speed, right foot shift, chain final drive
- Electrics: 6v, Lucas NC1 "wader" magneto
- Frame/wheelbase: Dual downtube cradle frame/55in (1,397mm)
- Suspension: Telescopic forks front, dual shocks rear

- Brakes: 7in SLS drum brakes front and rear
- **Tires**: 3.5 x 19in front, 4 x 19in rear
- Weight (dry): 380lb (173kg)
- Seat height: 33.5in (851mm)
- Fuel capacity/MPG: 2.4gal (9.1ltr)/60mpg (est.)





Buying a bike on Craigslist without seeing it first is not for the faint of heart. That didn't stop John Anton from purchasing this Matchless G80CS.

Craigslist, in case you are unaware, is an online flea market. Anything and everything may be found on Craigslist, from a Santa outfit for a newborn baby to a John Deere tractor. The seller writes their own description of the object, and buyer and seller make their own arrangements as to payment and delivery. The Craigslist website states, "Do not rent or purchase sight-unseen — that amazing 'deal' may not exist." Many sellers are honest, others are not. The Wild West is alive and well on Craigslist.

John Anton bought this Matchless sight unseen from a Canadian seller. It was supposed to be a runner, and appeared on delivery assembled, but with some unoriginal parts. Unfortunately, the description of the bike as a "runner" was a tad optimistic. "I could get four or five pops out of it, and I somehow doubt the magneto failed only during shipping."

John is not only brave, but persistent. Faced with a less-than-common 50-year-old motorcycle in much less than perfect condition, he rolled up his sleeves and set out to make it run.



History of the marque

Matchless was one of the oldest motorcycle companies in England, or, for that matter, the world. The Collier family, owners of Matchless, started as bicycle manufacturers. They built their first motorcycle in 1899 and started production in 1901. Matchless not only built complete motorcycles but also built engines for Brough Superior and Morgan three-wheeler automobiles.

In the early 1930s, Matchless bought another well-known factory, AJS, and renamed itself Associated Motor Cycles, often abbreviated to AMC. The company built well-regarded bikes with telescopic forks for the British armed forces during World War II and was one of the first to get back to civilian production after the German army surrendered. After the war, AMC bought several other brands that were teetering on insolvency. One of whom was Norton. For several years, Norton was operated as a completely separate concern, but eventually, AMC used some of the same parts on both Matchless and Norton motorcycles.

The 500cc G80 Matchless single was first introduced in 1946. Swingarm rear suspension debuted in 1949. In that same year, Matchlesses started turning up in the U.S. in Indian dealers' showrooms as part of a deal made by Indian president Ralph Rogers with a British firm, Brockhouse. Americans found the heavyweight Matchless singles to be very competitive offroad, and quite a few went desert racing in western states.

The target Matchless customer in the United Kingdom used their motorcycle to get to work, possibly heading out for a little offroad fun on weekends. Sport riders bought a Triumph or BSA. The road-going Matchlesses were not particularly fast, but had a lot of bottom end torque and were, for the time, very reliable. The company also built a well-regarded production racer, the G50, which two-time AMA Grand National



Champion Dick Mann rode to first place finishes in 1960s U.S. national road-racing.

AMC and its Matchless subsidiary chugged along happily during the 1950s, but as time went on, the company's business model became obsolete. Small, affordable automobiles became available in Great Britain around 1959, and, at the same time, Honda started exporting oil-tight motorcycles with bright lights and electric starting to Western countries. Most get-to-work riders opted for either a car or a small Japanese motorcycle. Matchless sales to American offroad racers dropped once lightweight 2-strokes became available during the 1960s. AMC's sales plummeted. The company declared bankruptcy in 1966, and was reorganized by Dennis Poore of Manganese Bronze Holdings into Norton-Matchless, and then re-reorganized as Norton Villiers. Some Matchless motorcycles were built through 1967, then all Matchless production stopped.

The G80CS

The 500cc G80CS Matchless single — John Anton's bike — was an evolution of the G80, intended to appeal to the dual-sport rider. In 1956, AMC shortened the stroke on some versions of the G80, including the G80CS scrambler, to 86mm x 85.5mm bore and stroke. The short-stroke engines were all aluminum alloy and were built with an integral pushrod tunnel. Since a major reason people bought G80CS Matchlesses was for desert racing in the western United States, AMC aimed to build a machine that would be competitive with the single-carb Triumph twins that made up much of the field.

AMC started building its own well-designed 4-speed gearboxes in 1957, and introduced a full cradle frame with double downtubes in 1960. In 1964, AMC, then in financial trouble, started using parts from Norton motorcycles on the Matchlesses, including the Roadholder front forks, full width aluminum alloy



hubs, and the oil pump. The Roadholder forks were not used on the G80CS.

Cycle World magazine did a road test of a G80CS in 1963. The magazine liked the Matchless' reliability, its large bottom end bearings, its abuse-proof clutch, the offroad-friendly air cleaner and the smooth shifting. Points were subtracted for the heavy flywheels, the "not outstanding" brakes, and the fold up footpegs, which would fold at the worst possible times. Matchless had replaced the G80CS's aluminum alloy fenders with chrome-plated steel fenders in 1963, and they were not protective in sand or mud. Although the bike was "as heavy as a sackful of anvils," it was "a most impressive all-round performer on clay roads, up sandy washes, over boulder-strewn creek beds and just about every place but on a paved road — and it seems likely that with the right tires it would be pretty good there, too."

The paved road test took place about 50 years later, and was published in an English magazine, RealClassic. An intrepid journalist, Martin Peacock, purchased a 1961 machine and took off on a tour of the English countryside. He reported, "From day one it started and ran like a very loud watch." Although it was not particularly fast, and the seating was reported as "firm," Peacock had a great time on the English back roads.

Then and now

Pumped by all the good reports of this bike, John Anton waded into his newly purchased machine. Fixing a not very common 50-year-old bike is more likely to be successful if you locate others with a similar case of old bike fever, and the local Britbike community pointed him to Jack Hurt, a nearby magneto guru. Anton installed the rebuilt magneto, but the Matchless refused to start. He took the mag back to Jack, who tested it and announced, "No continuity. I've never seen this before." Jack turned up a new carrier for the contact breaker assembly on the lathe. Still no start.

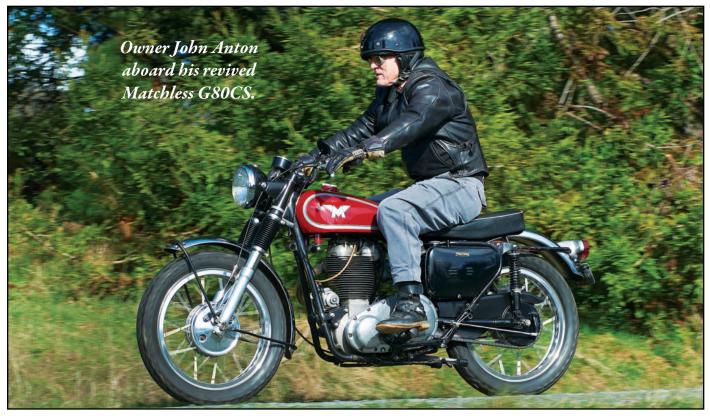
Next item for consideration was the Amal Concentric, correct for late model G80CSs. It turned out to have a plugged pilot jet. Anton cleaned up the carburetor and reinstalled it. Still no go ... but what about the spark plug? He located a replacement for the original, and now unobtainable, Champion plug. Finally, the Matchless started, and "thumped away like a good 'un."

Anton confesses that he "lacks the patience to fix one problem at a time." While he was trying to figure out why his thumper would not thump, he started rebuilding the forks. "I only wanted to swap one dented slider extension for another that came in the bag" the bag of extra parts that came with the bike. "First, the forks wouldn't budge from the triple clamps." The correct tool and advice on what to do with it was available on the internet, and once it arrived, the forks came off. By then, he had decided to replace the fork seals as well. Deciding to replace the fork seals led to deciding to remove and repaint the triple clamps, "which exposed a chamber of electrical and mechanical horrors inside the headlight shell." The steering stem locknut was terminally frozen, and Anton had to rent an impact driver to remove it.

On and on

While the front end was coming together, Anton started ordering replacement parts. The AJS & Matchless Owners North American Section sells a lot of the cycle parts, and the majority of the drivetrain parts for a G80CS are available from Britbike oriented internet sellers. Anton decided to build his own wiring harness (he says he likes the process), but rebuilding the harness with Lucas bullet connectors and color coded wire took months. A new and correct seat and chain guard appeared in the mail, but neither item quite fit, and took some time to massage into place. Anton was planning to ride the Matchless in the big annual British Bike run, but with the event around the corner, and the bike still in pieces, Anton went on another bike.

Additional unexpected problems arose with the side and centerstands. The sidestand was bent (probably



from prior owners jumping on the kickstart with the bike on the sidestand) and had to be straightened out. The bike should have had a centerstand, but didn't. The replacement that arrived via UPS fit only after several trips to a welder and repeated disassembly and reassembly. "Everything takes too much time on this bike!" Anton groused.

Finally, as a result of both bravery and persistence, the bike ran consistently and stopped leaking like the Exxon Valdez. Anton has replaced most of the incorrect parts with NOS parts or accurate copies. Incorrect parts currently on his machine are the Megura brake and clutch levers, the BSA taillight, the earlier year air cleaner ("I like the way it looks," Anton says), the alloy rims, and the slightly different muffler.

With most of the mechanical issues finally dealt with, Anton tackled the legal issues. Getting a bike imported from Canada — even a vintage bike — registered in the States is not a walk in the park. The key is to head for the DMV as soon as possible after the bike crosses the border — which Anton did not do, to his cost. The DMV considers a bike to be operational when it enters the state where you want to register it unless you immediately run down to the local office and fill out a "non-operational" affidavit, and will hit you up for yearly registration fees, which if you don't pay immediately, increase with penalties and interest. Having been run through the wringer by the DMV previously, Anton went with a private registration service. Unfortunately, the paperwork that came with the motorcycle disclosed the purchase price and date of sale, and, even with the registration service, Anton had to fork over \$700-plus to get a license plate. "With clenched teeth, I bolted on the new plate."

"Now it was time for the first legal trip on the road. Gas, oil, chain lube and tire pressure checked. Ease it over TDC and stomp. Then stomp again. No go. Plug out, big spark, plug in, more kicking. Finally, the staccato bark of a high compression single. Of course, it died as I fastened my helmet. More kicking, a helmet full of sweat, then — a glorious ride."

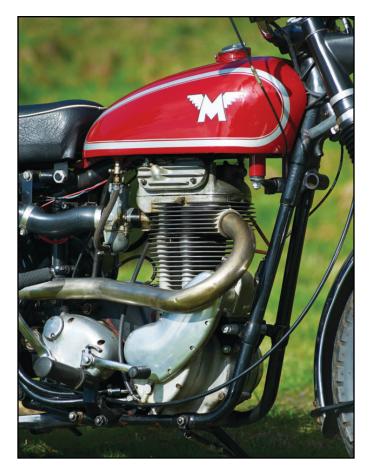
Since finishing the restoration (and paying through the nose to make the bike legal to ride on public roads) Anton has taken the G80CS on rides with the local clubs and a few solo excursions. Since the CS has magneto ignition, "it sits there until I want it," with no need to hook up a battery charger.

After some trial and error, Anton has figured out a starting procedure that will reliably start the Matchless

without the equivalent of an intensive workout at the gym. "Since it has a Norton clutch, you start with pulling in the clutch and working the kickstart lever to free up the clutch. The Concentric carburetor has a tickle button. It's important not to give it too much gas — just a little bit of tickle. You pull the compression lever and kick. I'm getting a lot better at kicking it over!"

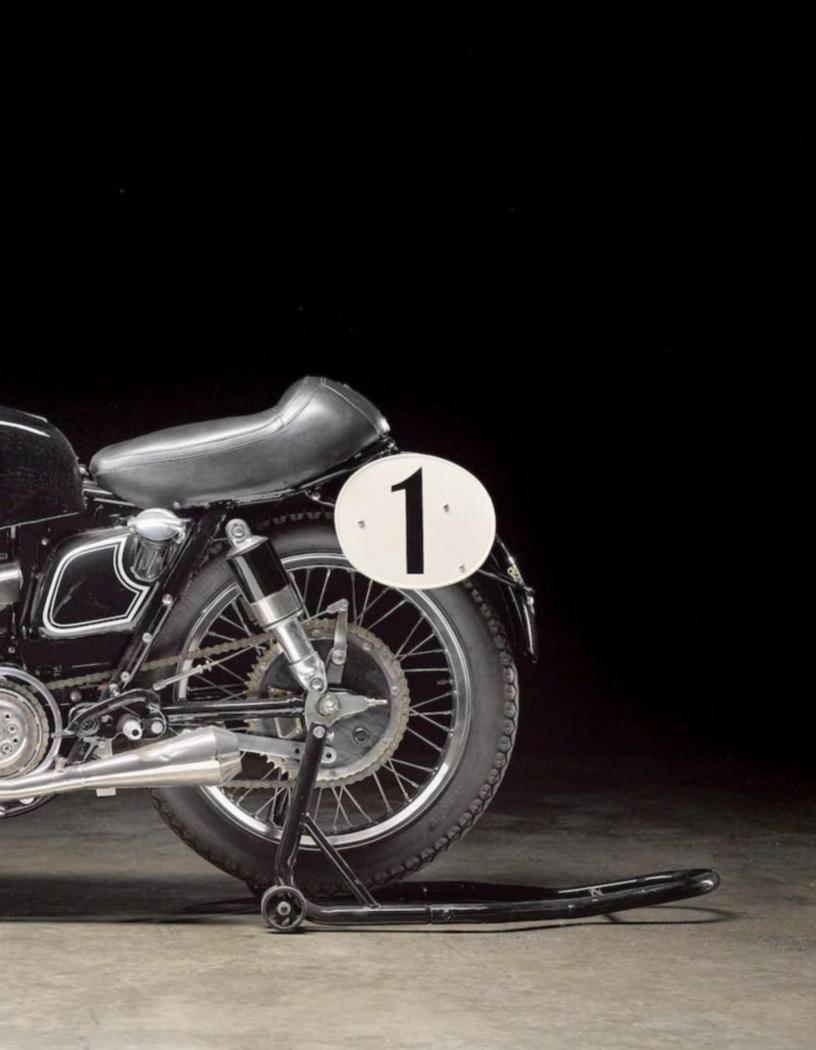
"It's nice on the road and goes along at a good clip." Anton reports that although the Matchless takes some time to warm up, it will chug away at idle once warm. The 4-speed gearbox is solid. For a scrambler, the gearing is surprisingly high, but the gears are widely spaced, and the engine will pull along a wide powerband. Also surprising for a big single is that it doesn't shake or vibrate at normal rpm. Not surprisingly for a 1960s British machine, the brakes are not the best. "The brake lever is too close in to really get a good pull."

John Anton's bravery and persistence has paid off in a unique and fun two-wheeler. "I'm happy with it. I never see another on the road — it's rarer than even a BSA Gold Star. I only know one other Matchless rider. It keeps up with traffic and I like the way it looks. It looks like a proper motorcycle. They got all that stuff right. Aesthetically, it's a winner." MC



I955 MATCHLESS G45 RACER





BRITISHMOTORCYCLESRACING THE MATCHLESS MOTORCYCLE COMPANY

Article by Ben Branch | Source: silodrome.com

Matchless was one of the world's first motorcycle manufacturers – they started out in 1899 when cars were a rare sight and the overwhelming majority of humanity was still getting around on horses or their own two feet.

From very early in the company's history, racing was an integral part of their DNA. Matchless was the trading name of Collier & Sons, founded by Henry Collier and his sons Charlie and Harry, the latter two later proved to be very talented motorcycle racers in their own right.

Charlie Collier won the very first Isle of Man TT singles race in 1907 aboard a Matchless, his brother Harry won in 1909, and Charlie won again in 1910. The race victories helped with sales, and by 1931 the company was in the position to buy out their competitors at AJS. Later in the 1930s they bought out Sunbeam, and formed Associated Motor Cycles (AMC) as an umbrella company.

The acquisitions didn't stop there however, Matchless under their new AMC banner would buy out motorcycle manufacturers Francis-Barnett, James, and Norton. Forming the largest motorcycle company in Britain and one of the largest in the world at the time.

THE MATCHLESS G45

The Matchless G45 was released in 1951 at the Manx Grand Prix piloted by Robin Sherry, he brought the bike home in 4th place in a very promising debut for a new model. That said, it wasn't quite all new, being somewhat based on the AJS 7R but with a new highly-tuned Matchless G9 roadster engine fitted amidships.

For use in the G45, the stock G9 engine was stripped and fitted with aluminum-alloy cylinder barrels and a new head with distinctively finned exhaust rocker boxes. The later production version of the model for 1953 would feature a new cam, roller followers, and a pair of Amal GP carburetors.

The visual similarities to the AJS 7R Boy Racer are obvious, and the bikes fought side by side on many circuits and road races of the era. The Matchless G45 took a dominant win at the Senior Manx Grand Prix in 1952, leading the race from start to finish and causing no small amount of consternation among the other competitors. Factory prototypes weren't supposed to be allowed, but Matchless quickly announced that the G45 would be available for public sale from 1953 onwards.

Over the course of the G45 production run just 80 or so were built, and it's thought that only about half that number have survived to the modern day.

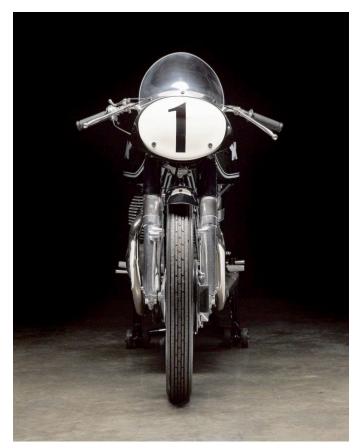
THE EX-SOUTH AFRICAN CHAMPION "BEPPE" CASTELLANI 1955 MATCHLESS G45 SHOWN HERE

This G45 is a little more special than most, it belonged to South African National Champion "Beppe" Castellani and was raced by him extensively in-period.

Not a lot is known about Beppe outside of his native South Africa, but he warranted a glowing mention in the autobiography of six-time Grand Prix world champion road racer Jim Redman:

"For the time being, the most important thing for me was to win the 1957 500cc Championship in South Africa but, unfortunately, I was beaten by Beppe Castellani, the current South African Champion, untouchable at the time."

Redman is an icon in the world of motorcycle racing, and he remains one of only two people in history to claim 3 Grand Prix victories in one day (the other being Mike Hailwood). Redman is also a six-time Isle of Man



TT winner, and by the time he retired he had amassed a total of 45 Grand Prix victories.

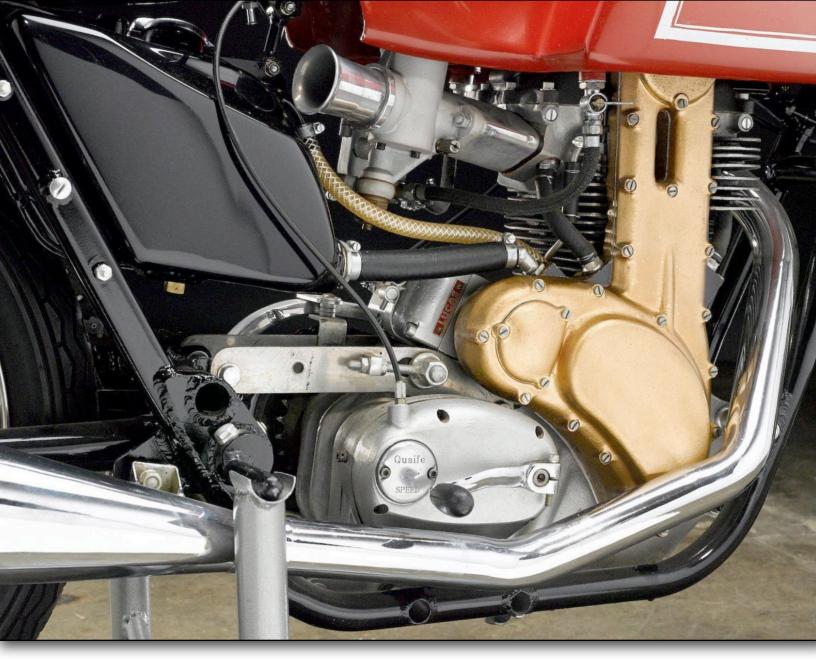
The fact that the little-known South African rider was able to best him aboard his Matchless G45 speaks volumes to the ability that Beppe must have possessed.

Fortunately, the Matchless survived the intervening decades. It's now fitted with two Amal 930 Concentric carburetors, as well as a Lucas competition magneto, an SS cam, and an oil filter in the return line. It benefits from the fitment of an AMC 4-speed gearbox with Newby dry clutch and chain primary drive, and it has a a front fork stabilizer, and Akront alloy rims fitted front and back.









MATCHLESS G50 RACING MOTORCYCLE

Article by Ben Branch | Source: silodrome.com

The Matchless G50 is a competition motorcycle first introduced in 1958, to compete with the Norton Manx and the other top notch racing single-cylinder motorcycles of the day.

THE MATCHLESS G50

Matchless, then owned by Associated Motorcycles (AMC), developed the G50 from the AJS 7R - a 350cc single-cylinder racing motorcycle commonly referred to as the "Boy Racer". The original stroke of the 7R was kept, combined with a wider bore of 90mm which gave 496cc – once tuned these engines were capable of 51+ bhp at 7,200 rpm.

The air-cooled single had been originally developed by Phil Walker in the 1940s with a chain-driven overhead camshaft and two valves. The later AJS 7R3 had three valves, a very small number were built and they were used exclusively for racing, with first wins in the first two rounds of the 1954 World Championship and AJS took 1st, 2nd, 4th, and 6th at the Isle of Man Junior TT (350cc) in the same year.

The Matchless G50 version of the 7R engine kept the same basic architecture, with magnesium crankcases and cam chain covers highlighted with corrosion-inhibiting gold paint. This paint had given rise to the nickname "Golden Eagle" which still sticks with the G50 to the modern day.



With a kerb weight of ~150 kilograms and a little over 50 bhp, the G50 provided stiff competition for the likes of the Norton Manx – although the Norton was more powerful, it was also heavier, so the Matchless could make up time in the corners.

Sadly, the G50 arrived on the scene too late to make a significant impact against the competition but many years later American Dave Roper rode a Team Obsolete G50 to a win at the inaugural Historic Isle of Man TT.

The popularity of the G50 has remained strong even decades after it left official factory production. Grand



Prix racer Colin Seeley bought the tooling for the model and continued to build them throughout the 1960s, selling them to competitors in the UK and further afield.

TGA Ltd eventually took over the tooling and production from Seeley, and today you can still order a brand new G50 that benefits from decades of improvements – resulting in a quicker bike than the factory originals back in the '60s.

THE EX-STEVE JOLLY EX-ALAN CATHCART 1962 MATCHLESS G50 SHOWN HERE

The G50 you see here has a somewhat illustrious history, it was one of the final 50 made before production stopped in 1963.

The bike was bought by rising racing star Steve Jolly in 1964 who piloted it to multiple wins in British short circuit races. Many years later in the mid-1980s Steve sold it on to motorcycle journalist and accomplished motorcycle racer Alan Cathcart, who later sold it on to a prominent Wyoming-based US collector.

Vintage Motorcycle News

$MICHELLE \bigcirc UFF - O CAREER WITH A TWIST$

by Helen Gibson (source: <u>www.ttwebsite.com</u>)

Many years ago I went to the movies in Douglas, and the supporting film was an account of the recovery from terrible injury of a Canadian rider called Mike Duff. Half way through the film of the operation on his leg, I slid under the seat!

As someone who dealt with all kinds of nasty injury at race meetings, I couldn't watch it, and flaked out! I never forgot the courage of the person concerned, and, while I was surprised to hear "he" had become Michelle, I was sure that the strength it took to deal with that change would have been readily found.

Incidentally I loved her description of how she had felt about her gender over the years..."I know that for my entire life I was wearing my shoes on the wrong feet". A couple of years ago I went to Assen to the Centennial Classic TT, and there she was, riding around on a works Yamaha, still stylish and fast.

I must admit to a bit of heroine worship here.

Here is Michelle's own story.

My father and mother were competitive people, he on bicycles and she on horses, so it seems I was conceived to ride something on two wheels that was self propelled.

When I was 15 I saw a local motorcycle race and enjoyed it. I rode a 500 Triumph Tiger on the road, and acquired a racing version as a basket case.

I thought I would take a year to rebuild it, and then I might be mature enough to make some decisions at 16... 4 weeks later it was



built, and my parents reluctantly signed a consent form for me to race at 15.

I never liked the American style of riding dirt track and TT riding. I preferred the gentle art of European Grand Prix racing, and looked to the European scene for my guidance. Geoff Duke and Bob McIntyre were my heroes. Typically for a young man, I bragged to my friends that I would go to Europe racing. In 1960, to my mother's horror, I called my own bluff and took the plunge.

I had been racing for 5 years in Canada. By the end of 1961, I began to think I might achieve some degree of success. Being Canadian was a novelty, and may have gotten me a few starts. However, once I got the starts, I showed the ability to justify them.

After my double win at Nurburgring in 1962, I could get a start anywhere. I had a product to sell... myself... but I did not know how to market it.

Motorcycle racing is perceived as being macho only by those who watch. Most riders are small in physical stature, large in perceived stature. Fully dressed in leathers, helmet, gloves and boots, I weighed in at 154 pounds... slightly smaller than Phil Read, but about the same height as Phil and Jim Redman. Unlike some riders who had to work at staying slight I had no trouble even with my voracious appetite for good food. Don't I wish I could do that now.

There were few bikes I disliked to ride. I rode because I loved to ride and was willing to ride just about anything. I think my favourite was the little twin cylinder 125 RA97 Yamaha. It was one of the fastest in its class, but not too fast, so many gears it was like pumping up a tire... 9 gears. It handled a treat perhaps was the closest I was going to come to be competitive enough to win a world title. It was fun to rides and my results on it seemed to reflect the joy. The Yamaha 250 RD56 twin was also a great bike to ride carrying with it a degree of prestige in its very presence, but it could be a pig at times and really frightening.

In the Island it was a real handful. Once I got accustomed to its idiosyncrasies, tying itself in knots at some corners, I realized it was not dangerous. It reacted consistently; it was predictable.

However, the 250-4 was another story. It was one bike I did not like. It was big, awkward and dangerous. The latest version, which I never rode, was, I understand, a treat to ride, and was, perhaps the best racing bike built up to that time.

The AJS 7R has a special place in my memories of "bestest" bikes and riding one at the Centennial Classic TT in 1998 refreshed my memory of what a super bike it was for a private rider, the G50 Matchless too, but with the bigger thump it needed a little more care in throwing it from footrest to footrest. By today's standards both of these were big cumbersome bikes.

Tom Arter was a super guy, for me perhaps a father figure. We hit it off from the very beginning. I miss him. Bob McIntyre was my hero. He unwittingly gave me the title for my book "Make Haste Slowly". I was on the boat going to the Isle of Man in 1960 and got talking to him.

He asked if it was my first year, and I confirmed it was. "Ah! Make haste slowly, laddie!" he said. I remembered what he said to me on that day, and it seemed appropriate as a title for my book.



I was particularly friendly with Hugh Anderson. We continued to write for some years afterwards, and do now occasionally. I travelled a lot between races with Jack Ahearn, and Phil Read and I hit it off for a while. It was Phil who pushed for me to be his teammate with Ya- maha, and we were good mates for a while, but then it soured. We still respect each other for what we achieved. I would have liked to keep in touch with Chris Conn, but it was not to be.

(note from Helen: I interviewed Chris a few years ago, and it was the first time he had spoken about racing since the day he retired. He specifically mentioned Mike Duff as a friend and someone he admired, but he had kept in touch with no one. He has now moved and I don't know where he is)

Racing is a lonely pastime. Occasionally, friends die. For me, coming from Canada, I had no other friends on the scene to share experiences. I made friends, but they were fleeting because of the nature of the sport. We all knew we would be going home to stay soon. In general, the paddock was a great social club with everyone sharing a single goal and love, so it was not difficult to make friends.

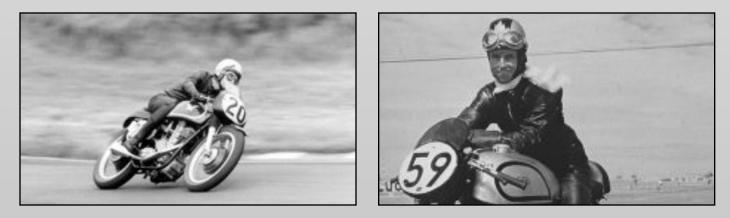
I have many stories . I might suggest you get a copy of my book to find most of them in detail! Time and space forbids me to write about all of them here.

However, two might be of particular interest:

We had been to the East German GP in 1965 with the Yamaha team. I had pole position with Phil read a few tenths of a second behind. Jim Redman was third on the Honda6 8 seconds slower. We thought we had the race won, but weather conditions on the day proved us wrong. Redman won going away, with Read second, and me 7th, I think, after stopping for fresh plugs.

The next weekend was the Czech GP and Read and I were out for revenge. From the start I tucked in behind Redman but the Honda streaked away from my Yamaha until we notched top gear and I pulled Redman back.

My job as second string rider was to get in Redman's way and slow us down until Read could catch up from his slow start. About mid distance he



caught us and the two of us pulled away at about 2 seconds a lap. It was probably one of the few races I could have or should have won, but I let Read win because he needed the points. Read was first, I was second with the lap record. We had our sweet revenge and I cried all the way to the bank.

I knew Mike Hailwood as another rider in the paddock. I was never his best friend or anything, but we went out drinking sometimes. I had been invited to his home for a party on one occasion, but like many riders in the paddock, during the off season we might meet at Brands during a practice day and then agree to meet afterwards for beer and some fun at a local restaurant.

Mike was the best of the best, without question. He rode anything to its limit, and often won on inferior equipment because of his riding ability. I can remember at Monza in 1966, I was riding my privately entered 250 Yamaha, and was battling for the lead with Mike, and Stuart graham, both on Honda6s. Mike was using me as the yardstick of how fast to go to keep the race interesting. I remember rushing past Stuart going into the first of the Lesmos, and took the lead thinking I was on the ragged edge.

Both my wheels were sliding on the road and I was using most of the track under me. I thought I was going really well, when suddenly this other bike appeared on my left going around on the outside of both Stuart and myself. It was Mike, with a big grin. As he took the lead, he turned back and lifted his arm and waved us on. A few laps later, Stuart retired, and my Yamaha went sour, leaving Mike on his own. To end the boredom he rode a bit quicker just to get the race over! He lapped something like 8 seconds faster than we had been doing together...and this was some 2 seconds inside the lap record I established in 64.

It is an understatement to say he was incredible. One did not appreciate how fast he was going until one tried to stay with him. Many tried, occasionally some came close, but most gave up or crashed.

Mosport Park is our local GP circuit. It was this race course on which the 1967 Canadian GP was run. I held the lap record at Mosport for some years.

I had not been around Mosport for about 7 years when I was lent a new R6 Yamaha road bike to ride around the circuit on a fun day. The bike was standard except for an after market exhaust system. It took me about an hour to start to feel comfortable again, and I started to lap faster than I had ever done in my prime on a proper racing motorcycle. Such has been the development in bikes since the 1960s.

The Yamaha R6 has definitely struck a memorable chord in my mind. Since, I have been hinting to Yamaha that it should give me a bike, but as soon as you use the word give, they seem to lose all knowledge of the English language.



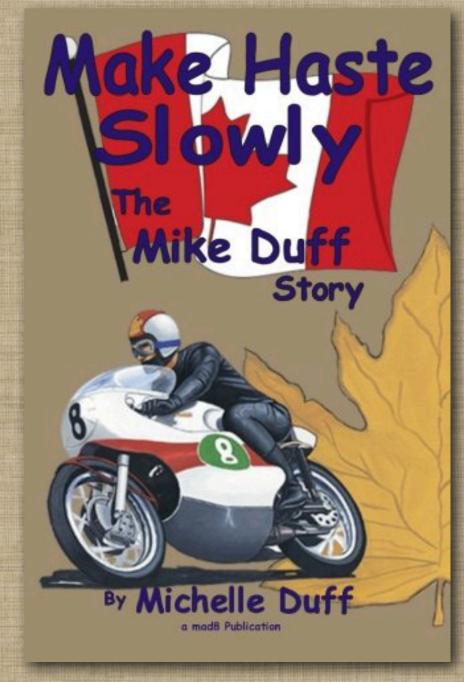


Vintage Motorcycle News

Make Haste Slowly: The Mike Duff Story by Ms Michelle Duff From Amazon.ca \$32.00

Make Haste Slowly chronicles the grand prix motorcycle racing career of Canadian Mike Duff, the first North American and only Canadian ever to win a world championship grand prix race. Duff won three GP events, the 1964 250 Belgian GP at Spa Francorchamps, the 1965 125 Dutch GP at Assen The Netherlands and the 1965 250 Finnish GP at Imatra Finland. In 1964 Duff finished 3rd in the 350 world championship riding a private 350 AJS 7R single. In 1965 riding a factory Yamaha RD56 250 twin Duff finished 2nd in the 250 world championship.

He never won a world title nor an Isle of Man TT, but he rode some of the most exotic racing machines ever built on race courses throughout the Grand Prix Continental Circus. He rode and conquered the intricacies of the Isle of Man TT and forever instilled its magic in his veins. He accelerated along glamorous racing circuits



that are but names in a book to most, and he mixed it with the best of the world's motorcycle racers and often emerged victorious.

During the 1960s, when the Japanese manufacturers began their dominance of GP racing, Duff had the best seat in the house to watch the titanic battles for first place between the stars of the time, riders like Mike Hailwood, Phil Read, Jim Redman Giacomo Agostini, Luigi Taveri and Bill Ivy.

Share these experiences with the author in minute detail from the perspective of Duff's seat aboard a factory Yamaha RD56 or RA97, a Matchless G50 or AJS 7R, or the legendary AJS Porcupine.

A story of courage, disappointment and reward, Make Haste Slowly is a must read for all motorcycle racing fans.

Duff has stood alone atop a winner's rostrum in silence to his country's national anthem then raised his arms to the tumultuous cheers of thousands all proclaiming an accomplishment that was singularly his.

What four times world champion, New Zealander Hugh Anderson says about Make Haste, SLowly - A tale of human endeavour with a truly unique ending; I truly enjoyed it.





OVERLAND TO VIETNAM

On his earlier expeditions, Gordon G May rode a BSA Bantam to the pyramids of Egypt, and then a Royal Enfield Bullet to southern India. His most recent adventure involved a WW2 military Matchless and a circuitous route across Europe to the Black Sea, through the Caucasus and into Central Asia, through China, over high-altitude passes and into Pakistan, across India, Nepal, Myanmar, Thailand and Laos to reach his intended destination. Upon reaching Vietnam, Gordon rode the breath-taking coastal route from Hanoi to Ho Chi Minh City. And then when he came home, he wrote a book all about it...

'Overland to Vietnam' by Gordon G May is the author / adventurer's latest offering, and it tells of his 11,500 mile journey to Vietnam on a 1941 Matchless G3L classic motorcycle. The single-cylinder 350 had recently arrived in England from Burma, and it needed a complete rebuild by Gordon and some very skilled friends.

This book is an excellent read. As you would expect, through Europe the journey is fairly easy; however it gets more exciting the farther East Gordon rode. On his travels he encountered tropical heat, often stopping to let the engine and himself cool down, and the other end of the scale, there was ice and snow.

On a trip like this you do not need a high speed bike – the Matchless just ploughed on through thick and thin. After a rock slide Gordon met rocks in the road the size of a domestic garage; this was one of the many problems that he encountered on the trip.

Eventually he arrived in Vietnam, a country with a population of 90

million people who own around 37 million two-wheelers. Scooters are everywhere. It is chaos at times on the roads especially at junctions.

At the end of the book there is a section on suppliers of bike equipment, riding and camping kit. As Gordon told me when I met him at a bike show; on a trip like this you need the very best kit that you can get. A very useful section indeed for anyone planning a long trip.

Whilst Gordon enjoyed the trip and riding the bike, you can tell that he also really enjoyed meeting and talking to people on the journey. The kindness and genuine hospitality that he met on the journey is outstanding.

Well worth a read.

Reviewer Roy Workman



Gordon G. May OVERLAND TO VIETNAM

A 11,500 mile adventure on a 74-year-old classic motorcycle



British made

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Motor Cycles for 1960

World Famous





Not all old British bikes have to cost a fortune. In fact, the AJS and Matchless 250 and 350 lightweight singles are still enticingly affordable. 'But aren't they also actually awful?' you may ask, and Rowena Hoseason has some answers...

There is one segment of classic society which remains stalwartly sensible when it comes to cost. That's because the Associated Motor Cycles (AMC) range of four-stroke singles wasn't wildly popular when new and has suffered half a century of bad publicity ever since.

The AJS and Matchless Buyer's Guide says that the 250 model was "a disappointment to both its makers and its riders' while the 350s were 'dull and pedestrian... a commercial failure and of very limited appeal."

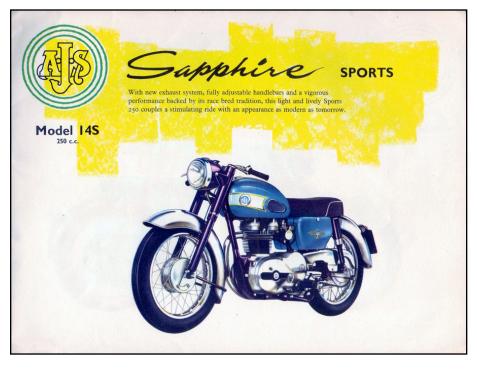
Matchless G5

So it's no wonder that the AMC lightweight singles, the G2 and G5 Matchless models and AJS Models 14 and 8, didn't initially set the classic world on fire.

But life as a classic bike is a lot less demanding than being thrashed by a teenage tearaway. As with Norton lightweight twins, the AMC lightweight singles can be improved with modern electrics and sensible maintenance. As a result, they've been gaining something of a modest following of late.

Hence prices have risen in recent years. Even so, their costs started from a low level and still sit in that convenient 'matured ISA' price niche.

A 250 which needs work will go for under £1500 via online auction, while a ready to ride,



well-fettled 350 with an MoT should set you back between £2500 and £3500 depending on whether you buy privately or from the trade. The small ads aren't crammed with examples for sale, but if you keep looking for a couple of months then you should spot one in average condition for less than three grand.

Very smart examples of the final AJS Model 14 CSR 250 fetch as much as earlier 350s, reflecting their sporty performance and the fact that the bike had been reasonably de-snagged by 1965. You might also spot an occasional 350 offered for sale at an extraordinary price, over £4000. It would need to be gold-plated to be worth that much. Still, god loves a trier.

1965 AJS Model 14 Sapphire the 250

If you can wield a wrench and don't mind taking a few risks then traditional auctions often turn up bargains. AMC lightweights often crop up among the early lots, and they attract very few bids from the upmarket buyers who waiting to spend their pension funds on a Manx, Goldie or Shadow.

These lightweights do come with their own catalogue of compromises however, so it's probably best to let you know the worst in advance. Like many learner and low-capacity machines they were subjected to hard use back in the day and will have been hacked around ever since. There are few people who'd consider spending £5000 on a top notch restoration of a G2, so many have been subjected to a lifetime of penny-pinching make-do and mend.

Beware the bike which has been brutalised by the man who wields big hammers... it's probably changed hands half a dozen times in the last decade. That's because no one likes it and (unless you're going to rebuild it from the ground up) you probably won't like it either and it'll cement any half-formed opinion about these bikes being suitable only for scrap. Look for one instead which has found long-term sanctuary with an enthusiast owner who has been happy to tinker with it and has a whole pile of spares to pass on, too.

The very first 250s of 1958 suffered from big end failure but this was quickly remedied by the factory and you'd have to be the unluckiest person on the planet to fall foul of that flaw now (unless you travel everywhere at 80mph and never top up the oil, of course).

AJS Model 8: the 350

A certain amount of lube leakage is inevitable, and we know of baffling 'seepage' from one 250 which was eventually traced to a porous barrel. Chris Read, former editor of The Jampot, has owned more than one of these wee beasts, and also suggests that the 'timed engine



breather was a bit over exuberant... oiling the rear chain and preventing any chance of rust forming at the back of the bike!'

The early front brake (snaffled from the Francis-Barnett range along with the forks) on the 250 was considered 'adequate' for 1950s traffic which means I'd consider it 'optimistic' for today's ABS-equipped affray. Steven Surby of AMC Classic Spares shares my concerns about the whole front end: 'the Francis Barnett/James forks fitted to the standard 250s scare me but maybe some owners like living on the edge!'

The wheels on standard 250s are 17-inchers so your tyre choice will be fairly restricted. The very long Girling shocks are now hard to find but the original items can be refurbished and re-filled.

The oil tank is tucked away on the right-hand crankcase wall and hidden behind a shiny outer engine cover, so its scanty 2.5 pints of lube don't benefit from much in the way of cool air flow. Overheating would be an issue if you regularly ride in hot weather (not in the UK then...) in urban traffic. From the outside, the engine and gearbox appear to be one unit but they aren't; it's another shiny cover disguising the separate entities which makes these machines rather more tricky to work on and rather less neat and tidy than BSA-Triumphs unit construction alternatives.

To adjust the primary chain you rotate the gearbox; interesting for folks of a technical bent, but this arrangement also means that the actual clusters sit rather high in the box and can be affected by lack of oil if the three-pint box isn't kept topped up to combat the inevitable



leak. Third gear (and the owner) will whine if they've been run dry.

To fix these kind of problems you will inevitably need replacement components, and here we consulted Steven Surby of AMC Classic Spares again. He initially sounded very positive; 'they're nice little bikes to ride ...' but then burst my balloon with; 'but awful when it comes to parts. Although they all look pretty much the same, there were a multitude of changes with the different models, year after year. All of these changes are badly documented in the spares lists, which are poorly illustrated, so the part numbers are rendered meaningless. It is much harder to find good spares, especially tinware, than it is for older Heavyweight equivalents.

'The numerous changes mean that there's very little interchangeability with parts. For example there are four or five different mainshafts and of course the different mainshafts have a knock-on effect on the clutch, etc. Similarly, if fork sliders need replacing, don't assume that the virtually identical and more commonly available sliders from the Heavyweights are interchangeable – they're not because the wheel spindle is 1/16" bigger on the Lightweights and can lead to cracked slider or worse.'

There was also much grumbling in old road tests about wobbly Wico-Pacy 6-Volt electrics but previous owner Chris Read reckons the 'lighting and ignition were good. WIPAC alternator rotors held (still hold) their magnetism far better than their Lucas counterparts, but on original machines there was a dreadful voltage sink that took the form of a length of resistance wire in the loom running up the crossbar under the fuel tank. The idea was that this would sink out excess power from the alternator when the lights were not being used in daytime. It did, but also frequently melted and the battery boiled!'

The cure for this is modern tricknology in the shape of electronic ignition which Chris says 'really makes the engine GO.' You'll also need a 12V conversion; 'easily achieved with the original WIPAC alternator and Boyer Power Box.' These machines are physically compact and modest in their performance, so they don't really suit stout chaps of six foot tall. But such Real Men have plenty of other old bikes to choose from...

...whereas, there are plenty of classic bike riders like meself who appreciate a lower, lighter machine which doesn't need a tactical nuke to start from cold. The AMC 250s and 350s are low, light and easy to fire up. Although Steve Surby reckons they are 'one of the heaviest Lightweights ever made' he also explains that 'they are pretty deceptive because most of the weight is carried so low, they give the impression of lightness. They're certainly easy to kick over (even the high compression CSRs) and very compact in size, so they do suit someone shorter in stature or those who find Heavyweights just a bit too heavy. My girlfriend actually shed tears when we sold our G2. I keep telling her our Model 8 is a better bike but she had developed an emotional attachment...'

The AMC lightweights steer very well – the CSR is 'exceptionally good' says Chris Read — and offer a proper, big bike riding position. They combine the look, feel and acoustics of the archetypal Brit four-stroke single with the ease of use of a two-stroke tiddler. The CSR versions even got a full-width British Hub front brake which Chris Read describes as 'altogether better' than the earlier equipment.

AMC lightweights are not exactly slow, either. The CSR versions of the 250 would achieve 75mph although a kind man would consider cruising at 60mph more reasonable these days. If you are a speed-crazed maniac then look for a 1965 vintage 'Ninety' which boasted a compression ratio raised to 9.5:1 (it was 7.8:1 back in 1959) and closer ratio gears for an 83mph ultimate velocity. Not bad for a 250, and the bigger siblings are even better according to Chris Read: 'They're hugely powerful for a 350 and quite capable of keeping up with the big twins once up to

speed on the open road. I had one keep up with me for about 25 miles at 75mph whilst I was riding a 650 twin on the A4!'

AMC lightweights are technically interesting for folks who like understanding their engines, but considerably less complex than Norton's twin solution to the same conundrum. The AMC singles are more robust and charismatic than, say, a C15, and less stressed and vibratory than many little 'uns. Chris Read reckons the clutch on his last one was 'light' while the 'gearbox was sweet and very positive... and engine very eager.'

So overall, as Chris says, these bikes are 'very underrated; very competent, with generally very good reliability.'

Plus – as I might have mentioned before – they're extremely good value. Or at least they were extremely good value, until I started talking about it in public!







Retrospective: 1958-1966 Matchless G12/CS/CSR 650

by Clement Salvatori | Source: Rider Magazine

The 1950s and '60s were the era of the UBM — Universal British Motorcycle — a parallel OHV twin sitting upright in the frame, in the 500cc to 750cc range. The original UBM was the Triumph 5T Speed Twin of 1938, soon to be copied by half a dozen of the major British motorcycle companies.

Matchless, which built its first motorcycle at the Plumstead works in southeast London around 1901, came up with its own version in 1948, the 498cc G9, with a 66 x 72.8mm bore and stroke. And a fully sprung frame, with a swingarm rear suspension. It should be noted that in the 1930s Matchless bought the AJS marque and the company became Associated Motor Cycles, Ltd., or AMC, the major difference between the two brands being the lettering on the gas tank.

The G9 engine differed from other UBMs in that it had a third bearing on the crankshaft, between the two connecting rods, to give added strength. The engine's dry sump lubrication system used the camshaft to run two oil pumps, one on each side of the crank, aiding in efficient lubrication; apparently these engines could go 75,000 miles before any major work was needed. Quite remarkable for a UBM of the era, when top-end jobs were often done at 20,000 miles, bottom-end at 40,000.

The two cylinders were separate, as were the heads, and while this seemed to work well with the 500, as the engine grew larger the lack of rigidity appeared to enhance vibration. During the 1950s most factories increased the size of the engine, with 650cc being considered the maximum reasonable size for a UBM, due to those vibratory concerns. In 1955 Matchless elected to bore out the engine to 72mm for an increase to 593cc — called a 600, designated as a G11. This was followed by the G11CS, or Competition Sprung, a street-legal scrambler with easily removable lights, and the G11CSR, a more roadworthy version, often called the Coffee Shop Racer. The CS models came with higher compression ratios and other performance enhancements...and often more problems. The frame used a single downtube to meet up with the full cradle holding the engine.

In 1958 Matchless offered 17 different models, including the first G12 650. The very important American market had been demanding that 650, the dealers needing it to compete with the Triumph and BSA 650s. Small problem: the engine could not be bored out any more. Solution: increase the stroke to 79.3mm, or 646cc. That was the G12, with the basic road-going model having valanced fenders and a reliable 7.5:1 compression ratio, and two sportier CS models with an 8.5:1 compression ratio and light alloy fenders.

The restroked engine required a new crankshaft, made of "nodular" iron, which flexed enough to reduce vibrations. It was also designed to incorporate a Lucas alternator, though still with six-volt electrics. A new frame with twin downtubes now welded to the full cradle was developed, which did help in reducing the vibration inherent in a 650 vertical twin using a 360-degree crankshaft, although the single-tube frame was also used.

The motorcycle seen here, which was built from bits and pieces, has a 1961 G12 engine in a 1959 single downtube frame. An AMC Teledraulic fork is up front, a pair of Girling shock absorbers at the back.

Gas tanks varied in size according to the model and year, but this '61 G12CS carried only two gallons, all you would need in a race, and was said to weigh 425 pounds with a full tank. And with 5.3 pints of oil in the reservoir.

Other changes occurred over the G12's years, including 12-volt electrics, sending out decent visibility from the seven-inch headlight. The basic G12 had 18-inch wheels, while this CS was running 19-inchers. Distance between the axles was a little more than 55 inches. Brakes were single-leading-shoe drums, an eight-incher on the front, seven on the back.

One interesting bit of history is that the Matchless marque was originally sold in the U.S. by Californian Frank Cooper, who became the AMC importer around 1946. He did quite well selling singles to win desert races, though the twins were not as popular.

In 1953, AMC acquired financially troubled Norton, although Norton production and sales remained quite separate, the U.S. importer being Joe Berliner, or J.B. Then, in 1960, AMC bought the Indian Sales Corp., which had been selling rebadged Royal Enfields — this was to get the Indian dealers, such as they were, to sell Matchboxes rather than Royal Oilfields. And AMC summarily fired Cooper, after 14 years of good work.

However, AMC filed for bankruptcy in 1962 (Cooper must have laughed), resulting in Matchless being merged more closely with Norton, and Berliner having to deal with Matchless as well. In early 1963, J.B. Matchless Corp. put a full-page ad in Cycle magazine promoting the G12CS and G12CSR...along with the 750cc G15 Matchless, which looked surprisingly like the Norton Atlas model that had appeared in 1962.

In 1963 that old 1952 Matchless/Norton arrangement, keeping them separate, changed drastically as bill collectors were pounding on both doors, and Norton production moved from its old Birmingham factory 100 miles southeast to Plumstead.

Not surprisingly, interest in the G12 waned considerably. The last Matchless ad I could find in a U.S. moto-mag was in Cycle's July 1966 issue, featuring the Atlas-based G15, and mentioning one G12CSR and two G80 singles. At the time British bureaucrats, knowing nothing about motorcycles, thought they could save the industry by merging Matchless, AJS and Norton into the company of an affluent entrepreneur and racecar driver, Dennis Poore. Poore was already looking after the Villiers engineering firm, which made most of the British two-stroke motorcycle engines. The Matchless and AJS names dropped from sight, and the new company was called Norton-Villiers.



Stanley Krobn's 1967 Norton N15CS. Photo by Robert Smith

Name Games: 1967 Norton/Matchless N15CS Consolidation in the British motorcycle industry led to the N15CS, a Norton with a Matchless frame.

By Robert Smith | Source: motorcycleclassics.com

1967 Norton/Matchless N15CS

- Engine: Norton Atlas 745cc air-cooled OHV parallel twin, 73mm x 89mm bore and stroke, 7.5:1 compression ratio, 55hp @ 6,800rpm
- Top speed: 100mph (est.)
- Carburetion: Two Amal 389 Monobloc or 30mm Amal 930 Concentric (late models)
- Transmission: 4-speed, chain final drive
- Electrics: 12v, Lucas K2F magneto or coil and breaker points ignition (late models)

- Frame/wheelbase: Matchless mild steel dual downtube double cradle frame/57in (1,448mm) (est.)
- Suspension: Norton Roadholder telescopic forks front, dual shocks rear
- Brakes: 8in (203mm) SLS drum front, 7in (178mm) SLS drum rear
- Tires: 3.25 x 19in front, 4.25 x 18in rear
- Weight (dry): 407lb (185kg)
- Fuel capacity/MPG: 2.5gal (9.45ltr)/40mpg (est.)
- Price then/now: \$6,000-\$12,000

Putting one maker's engine in another manufacturer's frame became popular in Britain in the Sixties. First choice was usually the very tunable Triumph 500cc or 650cc twin in a Norton Featherbed frame. The result was called a Triton, a blend recognized as almost a model unto itself.

So what do you call a Matchless motorcycle with a Norton engine? A Matchton? A Nortless? Well, according to Associated Motorcycles, the owner of both brands, it was either or both a Matchless and a Norton,



depending on which badge you preferred. Confused? You have a right to be, and there is an explanation — but first, some background.

Consolidation in the British motorcycle industry after World War II saw many brands absorbed into larger companies. When BSA bought Triumph in 1951, it became the biggest motorcycle manufacturer in the world at that time, also owning the Ariel, Sunbeam and New Hudson brands. Associated Motorcycles, the Matchless owners, had absorbed AJS in the 1930s, adding Francis-Barnett (1947), James (1951) and Norton (1952).

But by 1962, AMC was drowning in red ink, hit hard by the boom in imported scooters. To cut costs, they decided to close the crumbling and inefficient Norton plant in Birmingham and consolidate production at their Plumstead, London, factory.

Whether what happened next was planned or happenstance is moot, but it solved a number of issues for the company.

Finding a solution

Feeling the ever-present pressure for "more cubes" from its U.S. distributor, in 1962 AMC had launched a 750cc version of its own parallel twin as the Matchless model G15 (also known as the G15/45). In an attempt to mitigate mechanical issues (mostly crankshaft related), the 750 engine was detuned, yet it still proved unreliable, and the G15 was dropped in 1963.

And while the 750cc Norton Atlas had been selling well in the U.S., AMC realized it was missing out on a growing market for scrambler-oriented bikes because the featherbed frame used in the Atlas proved too fragile for off-highway use. Triumph and BSA had developed off-highway versions of their street bikes for desert racing that were both strong and handled well, the Triumph T120C and the BSA Wasp/Hornet.

But there was a solution. AMC had demonstrated that it had a strong enough frame for offroad use in the 650 cc G 12 CS (CS for Competition/Spring frame) of the early Sixties, unfortunately abandoned because of engine reliability issues. And with Norton production now in-house in Plumstead, AMC had direct access to the reliable and reasonably powerful Atlas engine — even though it had been detuned with a 7.5:1 compression because of excessive vibration.

For 1964, the G15 was relaunched as the Mk2 and fitted with the 745cc Norton Atlas engine, Norton Roadholder fork, and Norton brakes — the first AMC-Norton hybrid. The sportier, café-style G15CSR (R for road) soon arrived with swept-back headers, rear-set footpegs and lower handlebars. It was mainly intended for the home market, though some did make it across the pond.

Alongside the G15 and G15CSR were AJS branded variants, identical but for the badge and paint: the Model 33 and 33CSR were usually finished in polychromatic blue.

Based on the 650cc G12CS, the G15CS Atlas Scrambler, with its AMC frame and Norton Atlas engine, was built specifically for export. For the G15CS, the dual cradle frame and swingarm were modified to accept a 2-inch-over Norton Roadholder fork (fitted with internals from AMC's own Teledraulic unit) with steel tubes covering external springs, and a Norton rear wheel.

The Atlas engine was machined to accept the AMC alloy primary chaincase with drive to the AMC/Norton 4-speed gearbox. Gas and oil tanks and the battery box all came from the G12CS. The resulting bike was sold with a Norton badge as the G15CS/N Atlas Scrambler, and with the Matchless logo as the G15CS/M Matchless 750 Sports Scrambler. Both were finished in Cardinal Red.

They proved very competitive in desert racing, with Californian Mike Patrick winning the Cross-Country National Championship outright on an Atlas Scrambler in 1964, interrupting Triumph's domination of the Open class.

For 1965, the G15CS was relaunched with a Norton logo as the N15CS, and with the new winged Matchless tank badge as the G15CS. Changes included a revised fork (now with Norton internals), and with gaiters rather than steel tube covers.

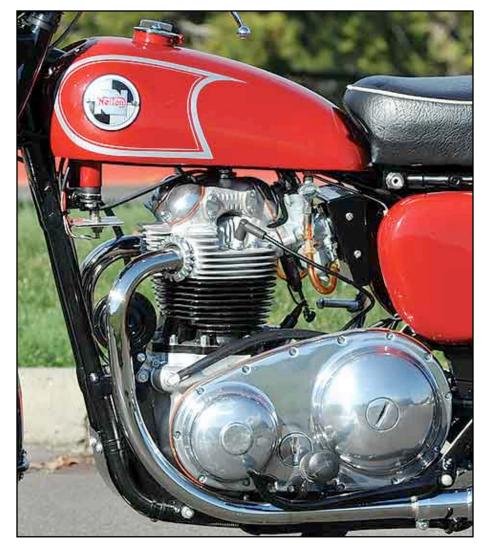
Production continued sporadically with numerous "serial" changes into 1967, by which time the N15CS was fitted with coil ignition replacing the magneto, Amal Concentric carburetors replacing the Monoblocs, and a new high-flow "six-start" oil pump. A slimmer seat and restyled fenders were fitted, and both the Norton and Matchless variants were finished in Cardinal Red.

When AMC ran out of money in 1966 and went bust, its assets were purchased from the receiver by Manganese-Bronze Holdings, and the company was re-formed as Norton-Villiers in early 1967.

New owner Dennis Poore had ambitious plans for the company, which included a new Norton to replace the Atlas — the forthcoming Commando. But another opportunity was about to present itself from the U.S.

California connection

The story goes that Joe Berliner of U.S. distributors Berliner Corp. saw an opportunity to create the ultimate British twin desert sled.



AMC's best offroad frame was the light-but-strong Reynolds 531 chromemoly dual downtube item used in the G85CS, the last of the Matchless line of offroad singles. But the 500cc single was down on power compared with the competition, and Berliner proposed an Atlas-powered version. However, AMC told Berliner they would be unable to fit the Atlas engine in the G85 chassis. Whether this was a technical or commercial decision is unclear.

California dealer Bob Blair of ZDS Motors in Glendale and his mechanic Steve Zabaro decided they would try. Blair had a G85CS with a crashed front end, which he fitted with a new fork and an Akront alloy rim laced to a Matchless hub. A new N15CS provided the donor engine. With suitable modifications and with Duralumin engine plates cut to suit, the Atlas engine was a snug fit in the G85 chassis, and became the prototype for the Norton P11 (Motorcycle Classics, September/October 2010).

Berliner sent the complete machine, together with Bob Blair, to the Plumstead factory to debrief what was required, and the first production P11 was built in March 1967. The basic concept, with numerous changes to components, remained in production for the following two years, through the P11A and street-legal P11 Ranger versions. The hybrid line was finally dropped in 1969 so the factory could concentrate on the Commando.



Stanley Krohn's 1967 Norton N15CS

The N15CS was more mix 'n match than just a Matchless with a Norton engine, like the P11. The N15CS featured here has an appropriate history.

It was originally sold by Pat's Top Hat Cycle in Burien, Washington. "Pat" Patereau was the Norton and Ducati dealer for the area, and his son Jim went on to be an accomplished local competitor. Stanley Krohn bought the N15CS as a used bike from Pat's in the late 1960s.

"Somewhere along the line it got kind of choppered out," says Mark Zenor of Zenor's Norton Service in Graham, Washington, who carried out the restoration. As Mark received it, it had the wrong rear fender and taillight. At the front was a different headlight, the forks had been modified 6 inches over, and it was topped off with *"chopper bars that were the chrome twisted squares,"* Zenor says.

Krohn had taken the Norton to a cycle shop that was going to rebuild the cylinder head, but the engine had never been reassembled, and the dismantled motorcycle sat in a shed for 18 years. *"We got it out of that shed four years ago,"* Zenor says *"I finally got it done this fall."*

Zenor could tell there had been some head work, but "it sat out in the open uncovered for that whole time, so it all had to come back apart." The cylinder head responded to the valves being re-lapped. Though the cylinder block was reusable, showing scuff marks and some minor scoring, Zenor replaced it after discovering a broken fin. Surprisingly, the bottom end was in good shape. "They're pretty hard to beat up," Zenor says, adding, "The gearbox wasn't too terrible. A couple of gears had that usual spalling and pitting, which we took care of. The rest of it was really finding the little bits, like the proper fenders, mounts and stays."

The seat proved especially problematic: "I don't think that seat's quite proper," Zenor notes. "It's in that in-between year." N15s are usually shown with a seat without the all-round seam on Krohn's bike. "I think it should have come with a little bit longer, skinnier, more rounded-looking seat, like you'd see on a Fastback, but I could never find one," Zenor adds.

Zenor's biggest challenge was "figuring out all the right nuts and bolts." It seems AMC never published a separate illustrated parts book for the N15CS, just a supplemental listing. That made finding the right parts even more difficult. "Everything's by number and period nomenclature. I'm doubly handicapped here. American English!" Zenor says. "It took me awhile to figure out 'pins' were 'bolts.' I worked with Mike Partridge at Walridge Motors. He's got a bit of a sweet spot for these hybrids. He keeps a good stock. We swapped some stuff back and forth, and I ended up getting just about everything down to most of the fasteners."

Zenor had the frame powder coated by American Powder Coating in Auburn, Washington (253-833-7870), to an "80 percent shine." The sandblasting was done by Performance Coatings, and the painting was done by Moslander's Rod and Custom in Monroe, Washington.

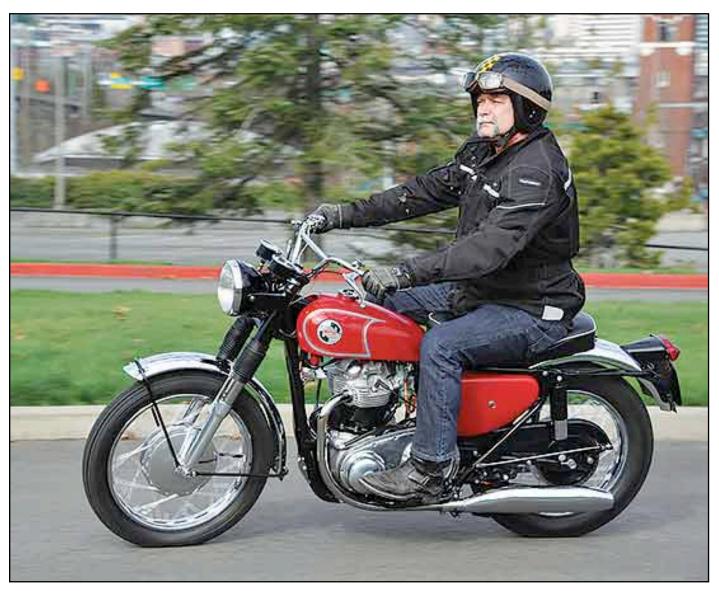
Putting it together revealed some interesting assembly protocol. "The centerstand and the bash plate. There's nothing that tells you to put them on first. They should really go in place before you load the engine and gearbox in there. I've got them on, but now that I've experienced it, doing it again I'd put it together differently, "Zenor says.

Part of the problem is that the Norton engine is a pretty tight fit in the Matchless chassis, which makes adjusting the magneto almost impossible. *"It becomes really apparent when you put it* side-by-side with an Atlas, and you can see how that gearbox and engine was really spread out for the frame. It's just leaps and bounds easier [the Atlas] to work on."

The N15CS is a perfect example of how adversity sometimes creates opportunity. If AMC hadn't decided to close Norton's Bracebridge Street, Birmingham, factory and consolidate production of Matchless and Norton motorcycles in Plumstead, it's quite possible no one would have thought of putting a Norton engine in a Matchless frame.

There's no question that the success of the N15CS in the U.S. kept AMC/Norton-Villiers afloat until the Commando came along in 1968, adding another 10 years to the life of the aging Atlas engine. But that's a whole other story...







Matchless Aews THE AJS & MATCHLESS OWNERS CLUB

NORTH AMERICAN SECTION



Volume 38

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Issue 6



A Dotted history of the AIS & Matchless Owners Club Ltd

A letter written by John Trant was published in the Motor Cycling magazine dated January 17th 1952. In this letter John asked if there was a Club for owners of AMC machines in the London area? He suggested that if there was not such a Club, then one should be started and interested AMC owners were asked to contact him at his home address.

From the replies he received a small group of enthusiasts met at the Ace Café on the North Circular Road, North London in late January 1952. An ad hoc committee was formed to get things running and within a short space of time a new meeting place had to be found since the numbers of enthusiasts turning up were too many for the space available at The Ace. The new venue was a pub in Greenford, but increasing numbers meant another change to a pub in Putney, South London.

Things moved quickly and during 1953/4 Club sections existed in Essex, West Hertfordshire, Kent, North London, Bristol and East Surrey with the Headquarters Branch being based in South East London.

In the early days of the Club, rallies were an important part of the events calendar. These were often two-day events with a fun and games gymkhana being the central theme. The first such rally was held in 1954 at a field owned by Raymond Way adjacent his house in Berkhampstead in Hertfordshire. Between 40 and 50 AMC motorcycles took part in the road run on that first rally, with members coming from many parts of the country. One couple, Mr and Mrs Alexander drove some 500 miles from Aberdeen in Scotland. They stopped overnight in Nottingham and after the rally they continued on down to the south coast of England to complete their holiday. It is not certain whether the journey was undertaken by motorcycle or car, but which ever form of transport they used it would have been quite a journey some 48 years ago.

The 1955 rally was held in the same venue with the 1956 rally moving to Tring in Hertfordshire. The modern rally was first run at Newlands Corner near Guildford, then Windsor and progressively expanded into the major events that we now know.

Today we have our beautifully presented Jampot magazine. In 1954 the first Club Journal was a loose leaf Newsheet. By 1955 this had become some 14 pages of hand written and Roneo'd copy (remember those machines?) known as AMC Owners Club News.

A member in 1955 paid a joining fee of 7s 6d (37.5p), plus between 2s 6p (12.5p) and 7s 6p (37.5p) for membership, depending on the time of the year that membership was taken out.

Up until around 1963 the Club was called the AMC Owners Club. Following the AMC Group takeover of Norton, followed by the James and Francis Barnett two-stroke marques, there was a desire on the part of the membership to be seen as separate. With no disrespect intended, the Club was re-named and became the AJS & Matchless Owners Club.

Many of the early members are still active and have an interest in the Club today and their knowledge and enthusiasm for all things AJS & Matchless has not reduced with the years. If we can get them to expand on these short words through the medium of The Jampot, we can all share in their experiences.

From those early days our Club has carried on expanding and now has some 4,200 plus members on a worldwide basis. The Club has its own Administration and Stores building with one of the best One-Make Owners Club spares scheme – AMOC Parts & Services and dedicated members who will come forward to run and manage the Club into the future.

More info on the club

The Club was founded in 1952 to cater for enthusiasts of the marque, and grew until in the late 50's it was large enough to rival all other one-make clubs. With the decline of motorcycling generally in the mid-sixties, the Club suffered as did manufacturers and other clubs alike, until the final blow came with the closure of the factory. No new machines or spares would be made and the future of the Club looked far from rosy. For a time enthusiasm for the marques was kept alive by only headquarters branch.

The '70s saw the formation of the new Club Sections and the re-birth of old ones bringing in a new lease of life for the Club. More and more machines are now being restored and are in regular use. In our estimation some 2,500 machines are owned by members of the Club. This is not a sum total as you as a new member may be bringing in a machine which is new to the Club. There are also many veteran, vintage and pre-war machines of the marques also in existence.

At present the Club consists of 36 UK based sections and 23 international sections with over 4,200 members, who live in Canada, Australia, New Zealand, U.S.A., Denmark, France, Norway and Sweden, to name only a few. We are therefore, a truly International Club.

What the club has to offer

The running of the Club is invested in a Management Executive, which is elected at the AGM. The Executive carries out policy decided at the AGM, but what the Club offers is a result of what we our members contribute.

MEMBERSHIP BENEFITS

Contact with fellow classic motorcycle enthusiasts through one of the largest one-make Clubs, with family participation actively encouraged. Ownership of a machine of he marque is NOT a pre-requisite to membership - just interest and enthuisiasm.

MONTHLY JOURNAL The Jampot, which is widely considered to be the most professional magazines of its kind. It contains news, letters, technical and historic articles and both private and trade advertisements.

ROAD RUNS & trials, camping weekends, & fun days at a racing circuit and many other social events on a local and national basis. The club's premier annual Jampot Rally is held in the UK during an August weekend, the Alternative Rally which follows a back-to-basics style of camping weekend and international rallies in Europe and beyond are all organised by club members.

SPARES SCHEME, offering a comprehensive range of new and second-hand spare parts, authentic transfers, manuals and regalia via mail order/telephone/fax or personally from the Club's own retail outlet in Northamptonshire. Credit cards welcomed.

MACHINE DATING SERVICE, accurate post war machine dating via original factory dispatch records and documents. Assistance with obtaining age related numbers and reclaiming original Registration numbers.

INSURANCE SCHEME, offering competitive rates with a first class service.

NATIONAL AND INTERNATIONAL, with 34 UK based, 8 overseas and 19 overseas contacts. Also affiliated to the Federation of British Historic Motor Vehicle Clubs (FBHVC).

TECHNICAL ADVICE available from local sections and the Club's technical helpline.

ANNUAL RAFFLE for a machine of the marque.

PRE-WAR MODELS the club is currently preparing a Pre-War register and aims to better cater for these models.

As a member of the AJS & Matchless Owners Club, you join with over 4,000 other enthusiasts world-wide who have an interest in motorcycling, both classic and modern. The club's ever developing services and activities are expressly geared to the promotion, preservation, riding and enjoyment of all classic machines, but especially bikes of these marques. Whether you're an old stalwart classic restorer, a born again biker or a complete newcomer to the classic bike movement, the club has a friendly welcome with an enviable reputation for providing the fullest range of services and a calendar of runs, trials and social events which spans the entire year.

For more information contact:

AJS & Matchless Owners Club Unit 3, Robinson Way Telford Industrial Estate Northants NN16 8PU UK



VAT	No.	380	1297	60

A.J.S. & Matchless Owners Club Limited Afiliated to the Federation of British Historic Vehicle Clubs OVERSEAS APPLICATION FORM								
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How did you hear about the club? Vintage	Motorcycle News - Winter 2021							
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AJS, MATCHLESS & NORTON HYBRID MOTORCYCLES OWNED (optional) The club is maintaining a compilation of AMC manufactured motorcycles in North America. To help us, we would be grateful if you would consider completing the table below with a list of machines currently owned by you along with relevant information.									
 <i>Key to provide data for the help 1, 2, 3 column in the table:</i> 1. I am willing to help members with technical advice on this model. 2. I have some spares that I would be willing to sell for this model. 3. I can furnish photographs or literature for this model. 									
Make Year	Model	Engine#	Frame	e# Tran	is# Tra	ins Type	Original	Y/N He	elp 1, 2, or 3
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Matthew Vale





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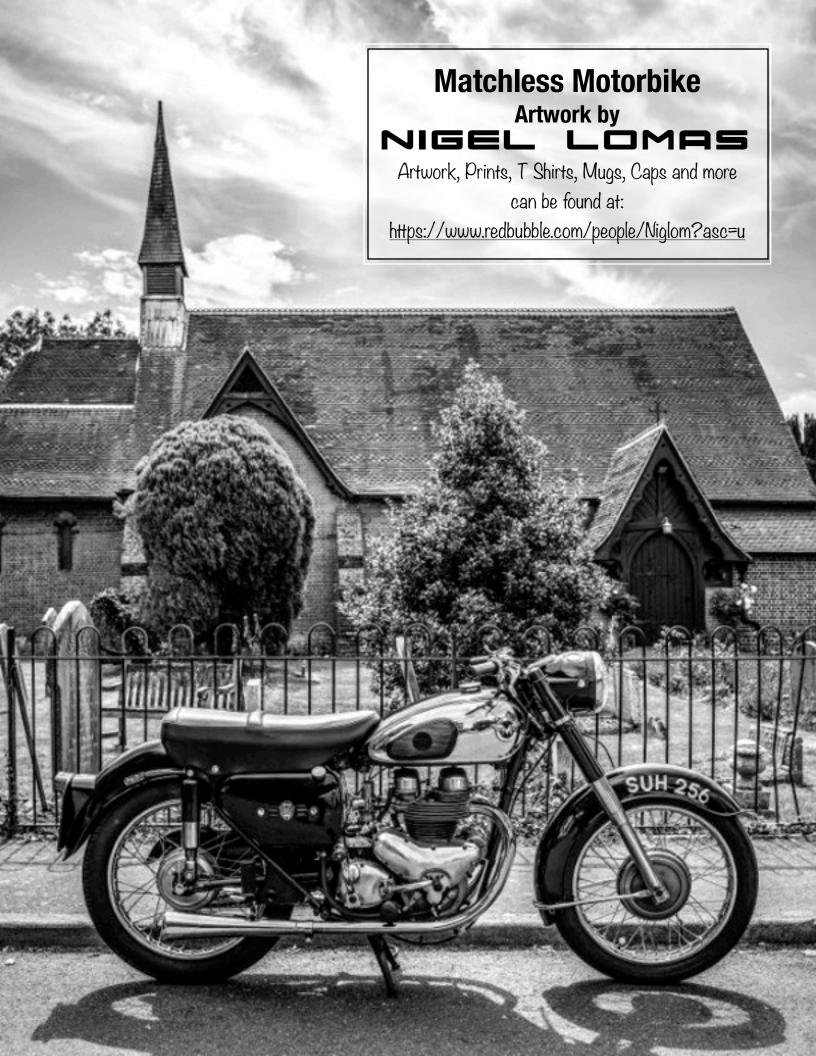
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We specialize in AJS, Matchless, Norton, BSA, AMAL, Lucas, Smith and Avon Tires.

However we also handle limited spares for Ariel, Royal Enfield (no India), Triumph and more.

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