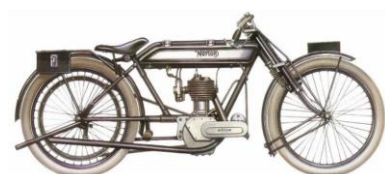
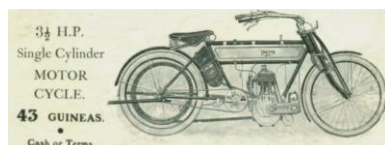


Motorcycles I've known – Murray Barnard – 2022 – Part 1

1910

Norton 500

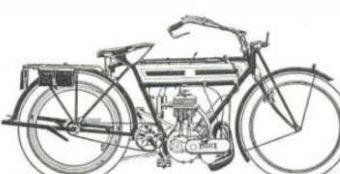
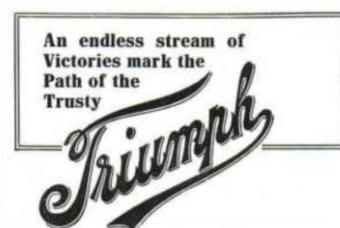
This Norton 3^{1/2} hp 500 cc single for 1910 is one of a handful of survivors from this era. First restored in 1975 by former 1930s speedway star Eric Langton and since ridden in many rallies and events in Australia and the UK. Eric retired to Perth, Western Australia and died there in 2001 aged 93. As well as being a very good rider in his day, he was also a time-served engineer and the skills learnt as an apprentice in the twenties served him in good stead in his Norton restoration. It had corroded crankcases and Eric went so far as to make a pattern and cast new ones.



Triumph

The first Triumph, a 298cc single-cylinder sidevalve, arrived in 1904. Within a couple of years 'Triumph' was a byword for reliability. The company was soon involved in racing, and the publicity generated by competition success - Jack Marshall won the 1908 Isle of Man TT's single-cylinder class for Triumph having finished second the previous year - greatly stimulated sales. By the outbreak of The Great War the marque's reputation for quality and reliability was well-established, leading to substantial orders for 'Trusty Triumphs' for British and Allied forces. The 3^{1/2}hp model first appeared in 1907. Originally of 453cc, its sidevalve engine was enlarged to 476cc in 1908 and finally to 499cc in 1910. By 1910 Triumph motor cycles had gained the enviable reputation of quality and reliability. During 1909 a rider had described his machine in the motor cycling press as "the trusty Triumph". Triumph took the expression on board and in early 1910 the "Trusty Triumph" advertisement appeared, and Triumph 'ran with the name' thereafter. With Triumph's hub clutch available in quantity, three models were catalogued for 1910,

and engine capacity of all models was increased to the competition recognised size of 500cc. 1910 was also the year in which Triumph riders took the first eight places in the single-cylinder class at the Isle of Man TT Races. 1910 also saw a Triumph cover 100 miles at Brooklands in 1 hour 38 mins managing 63 miles an hour.



Matchless 8 hp

This JAP engine 1000cc Matchless has been in the same family for well over 100 years. Matchless is one of the oldest marques of British motorcycles, manufactured in Plumstead, London, between 1899 and 1966. The first Matchless motorcycle was made in 1899, and production began in 1901. Matchless was the trading name of Collier & Sons, the father Henry Herbert Collier and his sons Charlie and Harry. Like many motorcycle manufacturers of the time, they

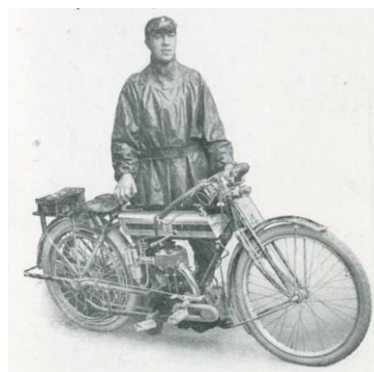
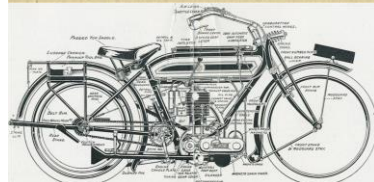
had started as bicycle manufacturers. They produced a JAP V-twin powered bike in 1905, with one of the earliest swing-arm rear suspensions, coupled with leading-link front forks. Charlie won the inaugural TT singles race in 1907 at an average speed of 38.21 mph in a time of 4 hours 8 minutes 8 seconds. Harry did not finish in 1907, but won in 1909, and Charlie won again in 1910, bringing Matchless motorcycles to the attention of the public. Matchless made mostly singles, but they also made V-twins from 496 cc to 998 cc.



1911

Triumph started out as a bicycle manufacturer in 1886. By 1902 the fledgling company marketed their first motorcycle using proprietary engines from Minerva and J.A.P. Jack Marshall gave the company their first TT win in 1908 with a new 3.5 hp engine. In the 1910 TT, Triumph netted the first 8 places in

their class. The 1911 Triumph was one of the most durable and reliable motorcycles ever made. The 3.5hp, 500cc motor would cruise up to speeds of 50-55 mph, setting many endurance records in its day. There is a free engine clutch housed in the rear wheel hub, actuated with a heel/toe foot pedal, while transmission is by a simple V-belt. The motorcycle's frame sets low, and the springer front fork is Triumph's own. Stopping, by Triumph's own words, is with "a powerful front rim brake" and the rear has a similar brake that retards against the belt drum. The rear stand does not interfere with the removal of the wheel, for flat tires, while the front stand acts as the front fender stay when clipped out of use. This was an amazing, well thought out motorcycle in 1911 and all for the sum of £55.

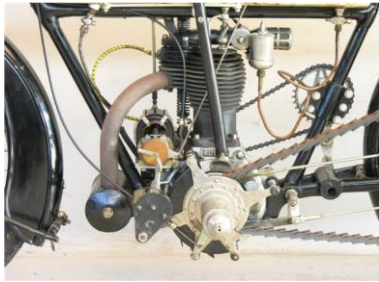


1912

Rudge Multi

The Rudge company were originally involved with pedal cycles and it was Dan Rudge returning to his home town of Wolverhampton after the Crimean War who opened a pub in Church Street where a colleague of his owned a wagon works opposite. Dan, a mechanic by nature, spent time tinkering and this led to the formation of Rudge. They commenced experimenting with motorcycles in 1909 and the first machine was produced in 1910. However it was during 1912 that the notable Rudge Multi was introduced. It was called a Multi as by adjusting the pressure upon a series of discs mounted on the engine mainshaft the gear could be varied, giving a ratio from 3 1/2 to 1 to 7 1/2 to 1 - an ingenious arrangement. By moving a long lever alongside the petrol tank about 18 different gear ratios can be selected. While on the move the rider can choose the engine rpm that gives most engine torque and then he can raise the actual speed of the machine by changing the gear ratio with the "multi-lever" without actually raising the engine rpm, a remarkable experience when being out on a multi for the first time. With the introduction of the Multi Gear in 1912 Rudge was far ahead of the competition. They won the 1914 TT races with this system and Ridges were subsequently barred from certain speed events because of their "unfair head start". The factory turned this to their advantage by using the "barred" logo in a clever company advertising campaign.





1913

Yale

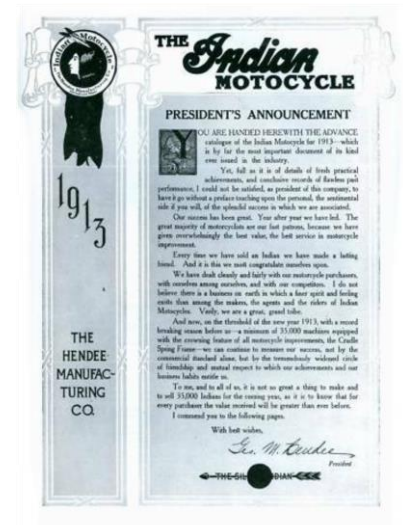
Yale's origins can be traced back to the California motorcycle of 1902 designed by Roy Marks and was essentially a bicycle fitted with one of Marks' patented 1½hp engines, which, like the vast majority of its contemporaries, drove the rear wheel directly by means of a belt. Despite its apparent crudity, Marks' California emphatically proved its worth when an example ridden by George Whyman completed an historic transcontinental crossing of North America on July 3rd 1903. This was the first occasion that such a crossing had been made using a vehicle powered by an internal combustion engine. It would be another three weeks before a gasoline-powered automobile did likewise. Just a few months later California's shareholders sold out to The Consolidated Manufacturing Company, which had resulted from the merger of the Kirk Manufacturing and Snell Cycle Fittings companies. Production shifted to Toledo, Ohio where the original model re-emerged, in slightly modified form, under the Yale-California name. The Yale-California of 1906 was a much sturdier affair than any of its

predecessors, being recognisably a proper motorcycle rather than a motorised bicycle. There was little change for the succeeding two seasons but when a totally new model arrived for 1909 the California part of the name was dropped, ushering in the first true Yale motorcycle. 1908 models had featured a loop-type frame, a year or so ahead of industry leader Indian, but for 1909 the bottom part of the loop was deleted and the engine became a stressed element once again. The 3½hp 'F-head' (inlet over exhaust) motor was all new and for the first time there was no outside flywheel. In 1910 Consolidated introduced the first Yale twin, a 6½hp model powered by an 'F head' motor. In 1912 the twin adopted the unusual horizontal cylinder finning for which this series of machines is best remembered, and for the first time there was an option of chain drive. The frame was redesigned with a sloping top tube for 1913, necessitating a new tank and giving the Yale a somewhat Indian-like appearance, while for the following year two-speed transmission and chain drive were standardised. By this time the engine - now of 7-8hp - had undergone a certain amount of revision. A kick-starter was introduced on the 1915 Yale but sadly this would be the last year of production for these handsome machines. With the coming of war in Europe, Consolidated had turned to the considerably more profitable manufacture of munitions.



Indian 1000cc Big twin

Oscar Hedstrom and Oliver Hendee, built the first prototype Indian motorcycle in 1901. That first machine was powered by a single-cylinder engine. The first powerful, large-capacity v-twins appeared in 1907. The twin's rear cylinder continued to form part of the frame until 1909 when a loop frame was adopted. The Springfield company's first 'Big Twin' debuted that same year displacing 60.32cu in (988cc). In 1911 Indian broke new ground yet again with their ohv four-valves-per-cylinder racers, and then in 1913 the Big Twin was up-dated with Indian's innovative, leaf-sprung, swinging-arm frame. At the end of 1915 the Big Twin (by this time equipped with a three-speed countershaft gearbox and displacing 998cc) was superseded by a new 'flat head' v-twin - the Powerplus - thus bringing to an end a noble line.





1914

Royal Ruby

Royal Ruby commenced motorcycle manufacture around 1910, offering a range of machines powered by LMC and JAP proprietary engines. Single-cylinder and v-twin powered models were offered, some of the latter being used for military sidecar duty in WWI, and the firm occasionally dabbled in the cyclecar market.

The company policy was to manufacture as much of the machines on site as possible although proprietary engines from J.A. P., LMC and Villiers were used with the 'Royal Ruby' name cast on them. After The Great War, the firm relocated to Altrincham, Cheshire but despite a reputation for quality second to none it failed to weather the post-war recession and went into receivership in 1922. A year-or-so later Royal Ruby reopened under new ownership in Bolton, Lancashire. Saddle tanks were adopted in 1927 and duplex loop frames introduced before the firm switched exclusively to Villiers power units for 1929. Royal Ruby ceased production in 1933. According to an article in the Motor Cycle describing a Royal Ruby motorcycle, "the machine throughout (is) a fine example of straightforward British workmanship ... presenting a neat and business-like exterior".

This machine is a 269cc 2 stroke 70mm x 70mm Villiers-engined lightweight which was added to the range in 1914.



Triumph

The first Triumph, a 298cc single-cylinder sidevalve, arrived in 1904. Within a couple of years 'Triumph' was a byword for reliability. The company was soon involved in racing, and the publicity generated by competition success - Jack Marshall won the 1908 Isle of Man TT's single-cylinder class for Triumph greatly stimulated sales. The 3½hp model first appeared in 1907. Originally of 453cc, its sidevalve engine was enlarged to 476cc in 1908 and finally to 499cc in 1910. By 1910 Triumph motor cycles had gained the enviable reputation of quality and reliability. During 1909 a rider had described his machine in the motor cycling press as "the trusty Triumph". Triumph took the expression on board and in early 1910 the "Trusty Triumph" advertisement appeared, and Triumph 'ran with the name' thereafter. 1910 was also the year in which Triumph riders took the first eight places in the single-cylinder class at the Isle of Man TT Races. 1910 also saw a Triumph cover 100 miles at Brooklands in 1 hour 38 mins managing 63 miles an hour. The beginning of the First World War in 1914 proved to be a major sales boost for Triumph. To provide for the Allied War Effort, production had to be massively scaled and Triumph produced 30,000 motorcycles to supply to the Allies. Among these was the popular Model H Roadster, that came to be known as 'Trusty Triumph' and was the first modern motorcycle from the company.

The Model H was powered by a 499cc air-cooled four-stroke single cylinder engine with three-speed gearbox for transmission and its rear wheel was driven by a belt. It also did not have pedals, a first-for any Triumph motorcycle.



1916

Harley-Davidson

Like many of their contemporaries, Harley-Davidson laid out their first engine along De Dion lines. A single-cylinder four-stroke displacing 25ci (400cc), which remained in production essentially unchanged until superseded by a 35ci cubic-inch (575cc) version in 1909. Of greater significance though, was the appearance that same year of the firm's first v-twin. Dropped at the year's end, the twin returned for 1911 in redesigned form boasting mechanically operated inlet valves and production really took off. Known as the 'pocket valve', this inlet-over-exhaust engine - built in 61 and 74ci capacities - would remain in production for the next 20 years. The need to make better use of the engine's power characteristics, particularly for sidecar pulling, prompted the introduction of a two-speed rear hub for 1914, by which time chain drive and a proper clutch had been adopted. Later that same year a conventional, three-speed, sliding-gear transmission with 'step starter' was introduced on the top-of-the-range version of the twin, which with full electrical

equipment, was listed from now on as the Model J. The Harley-Davidson twin in this general outline would endure for the next eight years.



1917

Douglas W Model

This Douglas machine was recovered as a wreck by Rex Edmondson from Lake Grace, Western Australia and was restored by Lat Fuller.

The Douglas model W (2.75hp) was a wartime model. During the First World War, Douglas, based in Kingswood, Bristol, produced over 70,000 motorcycles for the use of despatch riders in all theatres of the war. Motorbikes were first introduced to the British military after the Ministry of Defence made a deal with William and Edward Douglas of Douglas Motorcycles to produce, what they thought was 300 bikes for the military; what the contract actually proposed was to make 300 bikes a month for the duration of the war. The Douglas proved itself in the war even though it was not designed for such arduous conditions. After the war demand was so great for the machine that ex War Department machines were sold in great numbers and many manufacturers copied the basic design as demand was so great. Douglas went on to much road and race success in later years and only closed it's doors for good in 1962



1923

Beardmore Precision Model D

Beardmore Precision Motorcycles was a British motorcycle manufacturer. The original Precision company was set up by Frank E. Baker in Birmingham, and quickly established a reputation for performance motorcycle engines, supplying Haden, and Sun Motorcycles. Baker began to build complete motorcycles using frames supplied by Sun, who were

based at the nearby Aston Brook Street factory.

At the 1911 Olympia Motorcycle Show in London there were 96 motorcycles with Precision engines and by 1918 the company had over 800 employees. In 1919 Baker's company was merged with William Beardmore and Company, a Scottish engineering and shipbuilding company based in Glasgow and between 1921 and 1924 Beardmore produced motorcycles under the name "Beardmore Precision".

The first motorcycle produced was a 350 cc two-stroke featuring leaf-spring suspension front and rear and was followed by a range of motorcycles from 250 cc.

After 1924 Baker regained the rights and started his set up his own company to continue production with Villiers engines of between 147 and 342 cc in Alvechurch Road, Birmingham. The company was eventually sold to the James Cycle Co in 1930.

BEARDMORE
Precision
MOTOR BICYCLE

THE Beardmore Precision Motor Bicycle is intended for the rider who desires the fullest possible enjoyment and the least personal discomfort; who wants to use his machine every day and regards motor cycling as a pastime rather than as a feat of physical endurance; who prefers cleanliness to mere pace; who wants to feel that he has the best.

"Designed on novel lines with a new and apparently perfect method of lubrication. Its chief points are the luxuriously sprung frame, the petrol tank made from two steel pressings welded together and forming part of the frame and the two brakes, both of which are really efficient."

—THE DAILY GRAPHIC.

The Price is **£95** Complete. Particulars from
F. E. BAKER Ltd., The Precision Works,
King's Norton, Birmingham.

"The Same as You can Buy"

Continuity

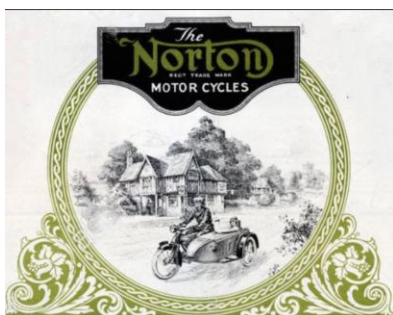


1924

Norton Model 18

The Norton Model 18, announced in 1922 and first listed in the catalogue the following year, became the first overhead-valve model with an engine designed under the watchful eye of J.L.Norton himself. The 490cc motor had a bore and stroke of 79mm by 100mm, developed plenty of power and was soon proving itself in competition, with Alec Bennett winning the Senior T.T. event in 1924 along with numerous other speed events and World Records. For 1926, a four-speed CAV-made gearbox was adopted along with internal expanding brakes and automatic primary drive chain lubrication. With the advent of the OHC CS1 Norton over the winter of 1926/27, the Model 18 and all subsequent OHV bikes were relegated to the role of fast, reliable tourers.

This bike was believed to have been raced at Albany, Western Australia, damaged and left on a farm until purchased by Lindsay Cooke. It took 20 years to accumulate the parts to restore it.



Royal Enfield

The year 1923 was a big one for Royal Enfield. Legendary designer Ted Pardoe joined the company and would go on to design many new models including the even more legendary Bullet. His energy and drive would be a key part in Enfield's success and in 1925 he became Head of Development. But more immediately in 1923, after more than a decade of V-twins and almost a decade of two-strokes, it became clear that a more powerful and modern single-cylinder engine was needed to flesh out the range.

Given Royal Enfield's hard-won reputation for quality, the decision to use the best power plant available, a JAP engine, came as no surprise. The result was a total of eight models shown at London's Olympia Motorcycle Show, including two new motorcycles with JAP four-stroke singles, one side valve – and a sports overhead valve option, the Model 351. From this moment on, a 350 single would remain in the Royal Enfield line until the present day. All machines were fitted with foot gear changes and Enfield two-speed transmission, but in 1924 three-speeds were offered, initially on the four-strokes. At the same time in came internal expanding drum brakes and some machines had the new 346cc side-valve Enfield engine in preference to the JAP. In 1925, Royal Enfield announced that the JAP engines would give way to the four-stroke singles of Ted Pardoe's in-house design, which would also see the three-speed Sturmey Archer gearbox standardized.



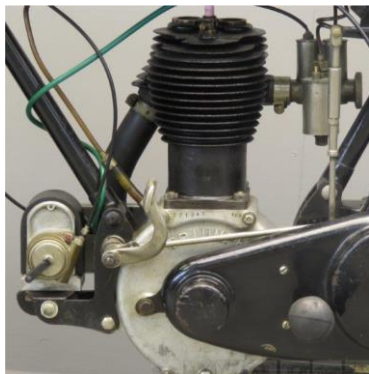
1925

Triumph P Model

The first owner, Mr Stan Cully of Manjimup, WA bought the bike new in 1925 and after some service as family transport, it became a farm bike until eventually being laid to rest at the back of his hay shed. In the early 1980's the bike was used as payment to John Rock, electrician, for wiring a new milking shed. The bike remains in the Rock family today.

A landmark machine in the development of the motorcycle in Britain, Triumph's Model P debuted at the 1924 Motor Cycle Show. A no-frills, sidevalve-engined model, the newcomer was priced at £42 17s 6d, at which level it undercut every other 500cc machine then on sale in the UK. The first batch manufactured was not without its faults, but once these had been sorted the Model P was a runaway success. Output from Triumph's Priory Street works was soon running at an astonishing 1,000 machines per week, and the Model P's arrival undoubtedly hastened the demise of many a minor manufacturer. Production continued until the decade's end, by which time the Model P had spawned a number of derivatives – models N, Q and QA - and lost penny-pinching features such as its guide-less valves and bicycle-type front brake. The "improved" Model P, announced at the end of July 1925, had stronger frame and forks, effective "leading shoe" internal-band front brake,

conventional push-rod operated clutch and guides in the cylinder head for the valves."



New Imperial Model 3B

In 1912 New Imperial Motors Ltd] offered a range of 3 motorcycles. In 1914, the 300 cc New Imperial Light Tourist model appeared. Its light weight enabled it to outperform some of the heavier 500 cc bikes of its time. The Light Tourist was the beginning of a line of advanced and innovative motorcycles. New Imperial used Precision and JAP engines of 250 to 1000 cc in their motorcycles until 1925 after which they manufactured their own engines of 146 cc to 498 cc.



Morgan Aero JAP

Morgan made its name with its lively three-wheelers, whose excellent power-to-weight ratio gave them an exciting performance. The chassis of the Morgan Three-Wheeler, designed in 1909 by company founder H.F.S.Morgan and unchanged in general design throughout the life of the 40-odd years lifespan of the vee-twin engined Morgan, was a marvel of ingenuity and lightness. The tubular backbone carried the propellor shaft from the motorcycle-type vee-twin engine; the engine mounts also supported the parallel transverse tubes whose outer ends formed top and bottom mounts for the sliding-pillar independent front suspension. Until the early 1930s, all Morgans had a simple two-speed chain drive with no reverse. Morgan 3 wheelers were offered as an alternative to a motorcycle and sidecar whilst still taking advantage of reduced road tax for 2/3 wheels over 4 wheeled cars. Fitted with a LTOW "Dog Eared" J.A.P. Engine – a vee twin, water cooled, overhead valve 1,098 cc (67 cu in) JAP motor, the Aero was good for 40hp and 70mph in standard trim.

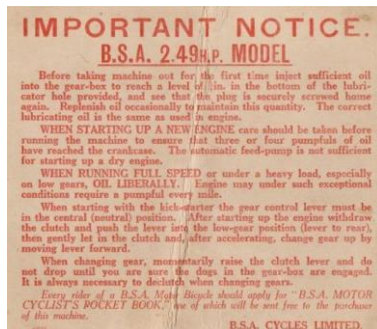
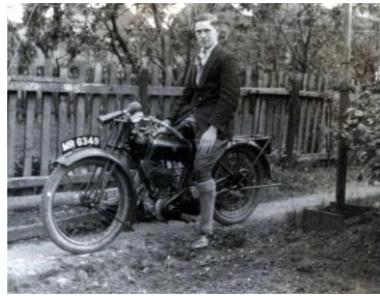


1926

BSA Model B26

BSA Model B26: Harry Poole at BSA's Redditch branch in 1923 came up with a real winner for BSA. From 1924-27 the Model B was in production and known affectionately as the Round-Tank BSA over 35,000 were built. The Model B was available in 2 or 3 speed versions. The BSA has foot and hand brakes but both acted only on the rear wheel. BSA had to go to court to get the bike licensed for the road with this strange arrangement. In 1926 they released two versions, the standard with a 2 speed box and stock standard green BSA petrol tank and the deluxe with a 3 speed box and black petrol tank. In 1927, the 'standard' had the round tank, but with a 3 speed box, but the deluxe got a new frame and an underslung wedge tank... both reverted to green petrol tanks (the 26 deluxe was the only one to have the black tank), both 1927 versions got front and rear drum brakes...The round tank was dropped for 1928 and BSA reverted to one version of the b model. The model B in time evolved into the

workaday Model C10. Tyres were 24in, oil system was total loss, top speed was between 45-50mph and fuel economy was 120mpg.



AJS: G8

The four Stevens brothers had been in motorcycle manufacturing since the final years of the 19th century, but it was only in 1911 that their first complete "AJS" motorcycle, a 298 cc two speeder, was marketed. For the 1912 season their first V- twin, the model D, was brought out. In the 1914 Junior TT a magnificent first and second place was scored. The 350 cc AJS OHV machines from the twenties got their nickname "bigport" from the enormous size of the exhaust port and pipe. Between 1920 and 1922 AJS was very successful in racing with 350cc ohv machines; their catalogued models then were all side valve machines.

For the 1923 season the ohv concept was first used for a customer model; its official name was the "2 ¾ hp three speed Overhead Valve T.T. model", but unofficially it immediately became the "Big Port" Ajay. From 1925 on prefixes were used to the numbering system: E=1925, G=1926, H=1927 K= 1928. The 500cc OHV model was introduced for the 1925 TT races; it made a big impression by making the fastest lap in history (till then that is) at a speed of 68.97 mph. It was first catalogued for the 1926 season as the Model G 8. Bore and stroke dimensions are 84x90 mm, carburettor is Binks with twist grip control and a Lucas magneto provides the spark. The cylinder head is detachable and lubrication is by mechanical oil pump and auxiliary hand pump.

AJS Motor Cycles

Score Again in the LONDON-GLOUCESTER AND BACK RELIABILITY TRIAL, December 1925, 1925.

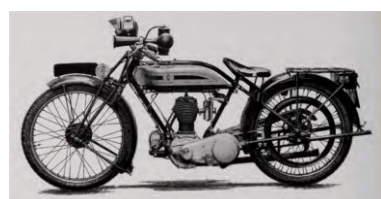
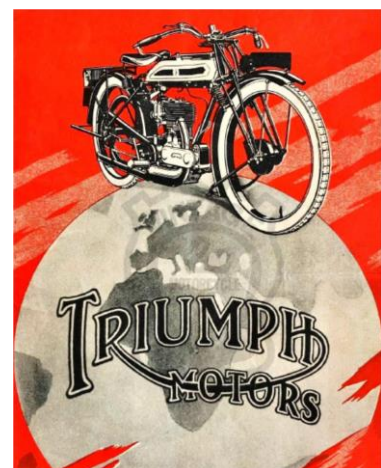
FIVE AJS. STARTED—FIVE AWARDS

4.98 h.p. AJS. and Sidecar
First Class Award—Silver Cup.
3.49 h.p. AJS. Solo Machine
First Class Award—Silver Cup.
Two Second Class Awards
3.49 h.p. AJS. Solo Machine.
One Third Class Award
G. B. Reid—3.49 h.p. AJS. Solo Machine.



Triumph Model P

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1927

FN Model 70

Like BSA, Belgium's La Fabrique Nationale d'Armes de Guerre began as a munitions manufacturer, turning to the production of motorcycles in 1900. Best known for its four-cylinder models, the Belgian company demonstrated the same innovative spirit in the design of its singles, being among the first to adopt unit construction of the engine and gearbox. The model M70 was introduced in 1926 and the model continued in production until superseded by the M71 in 1936. The external flywheel of the early models was coloured red, hence the model's nickname of "Moulin Rouge".

The launch of the M70 tourer, in 1927, was publicised by three factory-supported machines undertaking a daring trip from the Belgian city of Liège to North Africa and back, taking in a crossing of the Sahara desert on the way. Two French army officers and a Belgian mechanic crossed the Sahara Desert with M70s in April, May and June 1927. They covered 6300 km of desert without the machines failing them.

A heroic performance, that brought much publicity to the factory and coined the name "Sahara" for the brave little machine. The Sahara was a very successful machine: it was an easy starter; its reliability was high, and it had a then remarkable top speed of more than 90 km/hour. Petrol consumption 112 mpg, oil consumption 1800mpg. 1929 was FN's most successful sales year with more than 14,000 machines produced. The model proved very durable and a lot survive in Belgium, France, Germany and Poland. A version

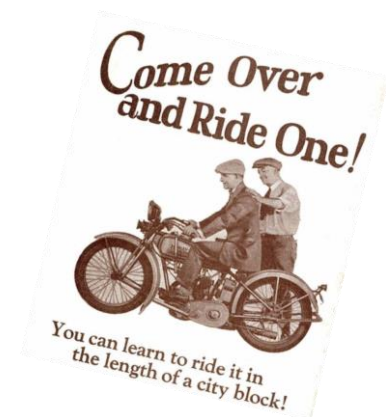
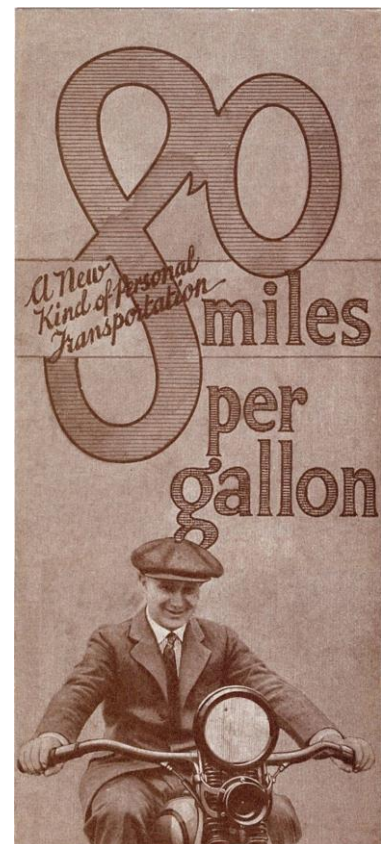
was built in Germany under the name BAM to overcome foreign currency restrictions.

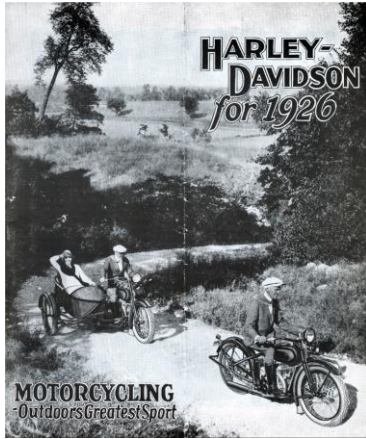


Harley-Davidson Model AA

The Harley-Davidson Peashooter is a single-cylinder motorcycle originally released in 1926. The market for big twins was strong in the 1920s, but there was a larger market for simpler, smaller motorcycles. Countries like Australia, New Zealand, South Africa, Rhodesia, and regions like Europe, were more interested in economical and less expensive motorcycles – so a new 350cc Harley-Davidson could potentially open up new markets for the American marque. In 1926 Harley-Davidson introduced the Model A and the Model B, both single-cylinder motorcycles with 350cc engines. Both were sidevalve-engined (the A had a magneto, and the B had a battery/coil), for those who wanted to go racing the models were also offered with an OHV engine offering 50% more

power. Understandably, the side-valve engine was cheaper and sold far better – but it was its overhead-valve brother that would become an icon of the then-new dirt track racing scene. The Model S, it used the OHV engine, but with modifications giving it 30hp and a reported top speed of 100mph. The nickname "Peashooter" was given to the bike as a reference to its unusual exhaust popping sounds – a side effect of the performance tuning done on the OHV race bikes. In total 321 Model AA machines were built.





1928

Triumph Model N

The Model N Triumph of 1927/28 followed in the best traditions of the 'trusty' Model H. It was powered by a vertical, single cylinder engine of 84 x 89mm bore and stroke with a capacity of 494cc. Transmission was via a three-speed, hand-change, gearbox and the Model N featured a streamlined saddle tank with blue panel and gold lining. The De Luxe model featured sports handlebars and weighed just 260 lbs. With acetylene lamps and horn it sold for £49/7s/6d. Below: *the bike before restoration by Bruce. A wonderful job of preservation.*



AJS 8hp Model K

Formerly suppliers of proprietary engines, the Stevens brothers of Wolverhampton diversified into manufacturing complete motorcycles, setting up A J Stevens & Co in 1909. A 5hp v-twin - the Model D - joined the range in 1912. Intended for sidecar work, the Model D was powered by a 631cc sidevalve engine and came with a 'beefed-up' version of the two-speed gearbox. The Model D's engine was enlarged to 696cc (6hp) for 1913, while a three-speed gearbox and internal expanding rear brake were additional improvements. A new, smaller 'Double-Purpose' v-twin - the 550cc Model A - arrived in November 1914, at which time the Model D was re-designed along 'A' lines and further enlarged to 748cc. Endowed with an effortlessly flexible motor and built to A J Stevens' traditionally high standards, the v-twin 'A-J' was one of the most effective and popular sidecar tugs of its day. The model remained a fixture of the range into the early 1930s, latterly with a 998cc engine.

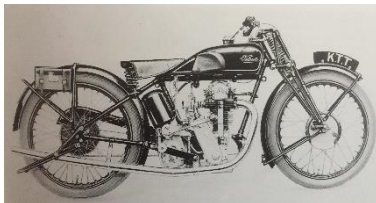


1929

Velocette KTT

Continuously developed, the innovative Velocette two-strokes had proved reliable, economical and very popular, but by the early 1920s it had become apparent that a more upmarket model was required. Other manufacturers were fielding new overhead-valve and overhead-camshaft machines, and Veloce Ltd followed suit, the Percy Goodman-designed, overhead-cam Model K first appearing in 1924. Of 348cc, the new engine employed a single overhead camshaft driven by vertical shaft, and was unusual in having a very narrow crankcase, an arrangement determined by the existing transmission and frame design, which made for a stiff crankshaft assembly. Entered in the 1925 Isle of Man TT, the new model K did not fare well, all three entries retiring because of lubrication problems. Its engine redesigned to incorporate dry-sump oiling, the 'cammy' Velo returned the following year to score a memorable victory, Alec Bennett romping home in the Junior race 10 minutes ahead of the second-place rider! Second place in 1927 followed by another win for Bennett in 1928 ensured a healthy demand for Velocette's overhead-cam roadsters and

prompted the launch of the KTT, one of the most successful over-the-counter racers of all time. By the end of the 1920s, Veloce's range of K-Series roadsters boasted a host of variations on the theme that included Normal, Sports, Super Sports, Touring, Economy and twin-port models.



AJS M1 996cc

The Stevens brothers of Wolverhampton diversified into manufacturing complete motorcycles, setting up A J Stevens & Co in 1909. The brothers' first machine was a 292cc (2½hp) single. A 5hp v-twin - the Model D - joined the range in 1912. Intended for sidecar work, the Model D was powered by a 631cc sidevalve engine and came with a 'beefed-up' version of the two-speed gearbox. The Model D's engine was enlarged to 696cc (6hp) for 1913, while a three-speed gearbox and internal expanding rear brake were additional improvements. A new, smaller 'Double-Purpose' v-twin - the 550cc Model A - arrived in November 1914, at which time the Model D was re-designed along 'A' lines and further enlarged to 748cc. A 799cc (7hp) engine was

first introduced for the 1921 season and then in 1925 AJS adopted an alphabetical year designation; all the '25 models were identified by the letter 'E', the two versions of the v-twin combination being known as the E1 (magdyno electrics) and E2 (magneto only). AJS omitted the letters 'F', 'I', 'J' and 'L' from the sequence so for 1929 all models were identified by the letter 'M'. The v-twin sidecar tug featured a new 996cc engine for '29 and was available as the M1 and M2.



BSA 1929 Sloper

The BSA S-Series of motorcycles, most commonly known as the BSA Sloper, were a series of motorcycles produced by the Birmingham Small Arms Company (BSA) from 1927-1935. Launched in 1927, the 493cc overhead valve engine was slanted, and the motorcycle featured a saddle tank that enabled a low seating position, improving the centre of gravity and handling. The Sloper range remained much the same until its demise in 1935. Each model was designated with the two letters of the year produced, hence the S29 was produced in 1929. The first models featured a 493cc (80x98mm) single ported cylinder-head, topped by a cast-aluminium enclosure for the rockers, with exposed valve springs. Alongside the cast barrel were plated tubes to cover the pushrods. Easy cam contours and wide bases on the tappets ensured no associated valve clack, meaning that the Sloper was regarded by

many as one of the smoothest and quietest of sporting 500cc machines. The large crankcase accommodated both a large and heavy flywheel, and a separate oil feed tank controlled by a hand meter. Early models had a duplex-frame and three-speed gearbox, but soon the top tube was replaced by an I-frame forging to support a new steering head. By the 1929/30 the engine carried a twin-port head, and the ohv joined by a less-popular side-valve model; these models also had extra chrome. From 1932 all were equipped by a 4-speed gearbox. From 1930 there was an optional sporting kit for £10, including a high-compression piston, hardened valves and springs, and a racing sparkplug, but the company noted that there were few buyers. The model ceased production in 1935, by which time there were only two models, an overhead-valve and a sidevalve, both of 595cc. The large heavy flywheel and easy cams gave the Sloper a slow purposeful tick over, which was supplemented by large fishtail silencers. With a purposeful rhythm, together with its easy handling, they may have added to choice of its name. Cruising speed was 55 miles per hour (89 km/h), with a top speed of around 75 miles per hour (121 km/h).



1930

Ariel Model F

The new line of Ariels, introduced at the end of 1925 and designed by engineering genius Val Page, had been an instant success. Not so

much because of its technical innovations, but mostly for its very attractive styling: lower saddle position, shortened wheel base and high saddle tank. Within a few years Ariel sales and profits rocketed. In 1927 sales were ten times as high as the 1925 sales before the introduction of the new line of machines. The 5 basic models (A,B,C,D and E) that were produced in 1927 were continued for 1928, but with many improvements. The most noticeable was the adoption of Brooklands-type fishtail silencers, the use of enclosed valve-operation gear on the ohv machines and redesigned frames on all models. The OHV models have bore x stroke dimensions of 81.8x 95 mm. For 1929 the C and D model designations were changed to E and F; the latter machine was the De Luxe version with wider front mudguard, larger saddle, wider tyres and luggage carrier. There were quite a few new features for the 1929 range, the most noticeable being the dry sump lubrication with separate oil tank and the ribbed crankcase. Other than a new tank the 500 stayed the same for 1930. The 500cc. ohv single was state of the art at the time, its purposeful lines and finish giving some indication of the quality and performance to be had from Ariel's by the discerning motorcyclist of the era.



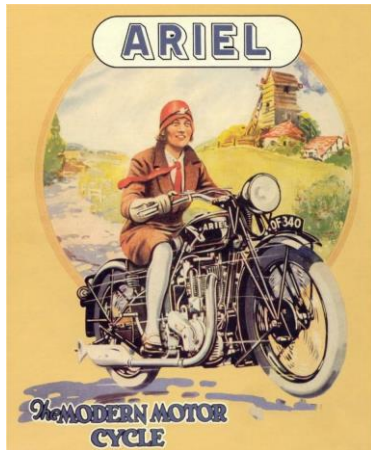
Ariel Model G

Ariel introduced an entirely new range for 1910 powered by the White & Poppe 3½hp engine. Essentially Edwardian in conception, the 3½hp Ariel remained in production until 1925 when new Val Page-designed singles took over. Ariel's design department was blessed with a surfeit of talent as the Selly Oak firm entered the 1930s, Chief Designer Val Page having under his wing both Edward Turner and Bert Hopwood.

It was Page though, who had laid down the basics of Ariel's four-stroke singles range in 1926, moved the magneto behind the engine for '27 and thus established the form in which the engine would survive for the next 30 years.

The Model G Ariel 500 for 1930 was the Sports version with twin exhaust ports and polished engine assembly.





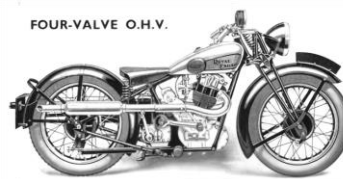
1933

Royal Enfield LF Bullet

Royal Enfield - 500cc - 1933 LF Bullet: 'Royal Enfield was a brand name under which The Enfield Cycle Company Limited of Redditch, Worcestershire sold motorcycles, bicycles, lawnmowers and stationary engines which they had manufactured. Enfield Cycle Company also used the brand name Enfield without Royal. The first Royal Enfield motorcycle was built in 1901. The Enfield Cycle Company is responsible for the design and original production of the Royal Enfield Bullet, the longest-lived motorcycle design in history. Enfield's remaining motorcycle business became part of Norton Villiers in 1967 and that business closed in 1978. Slopers' with inclined engines were a feature of Royal Enfield's range in the early 1930s, which also saw the 'Bullet' name used for the first time for a range of overhead-valve sports models of 250, 350 and 500cc, this designation being revived post-war.

The larger machine had four valves. All had a raised exhaust. The Bullet name derived from the fact that the 500cc with very little tuning, stock parts and a raising of the final gear, was capable of almost reaching 100mph. Jack

Booker ran a quarter mile in 9.1s timed by Motor Cycling, an equivalent speed of 98.9mph.

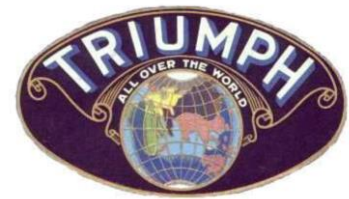


Triumph - 550cc - Silent Scout Model A

Bought as a box of rusty bits in 1978, spent years looking for parts. Restoration commenced 2 years ago. One of only a few running examples in the world.

Following the success of the range of inclined-engined models of 1931, Triumph followed up with top-of-the-range 500 and 550cc inclined-engined machines. Designed with totally enclosed 'harmonic' cams these were claimed to have been 'remarkably silent' and were thus designated to be 'Silent Scouts'. They missed the 1931 Olympia Show appearance for new 1932 season machines, so required a separate sales leaflet when they appeared in March 1932. "Quality, Comfort, Speed with Safety" were claimed and optional quickly-detachable legshields and side panels completed a very impressive specification. This included Triumph's first available rear 'Stop Light' and first (full flow) oil filter. Another Triumph 'first' came with the 1932 models in the form of an

optional tank-top instrument panel. As with the other inclined cylinder models oil was recirculated from a crankcase oil reservoir. A problem with the oil pump had not been resolved, but a cheaper 'fix' was designed into the oil pump of the Scouts. There was also a Sports version of the overhead valve model. A 'Rolls Royce' among the Triumph inclined-engine models.



1934

Indian Chief

The Indian Motorcycle Company is the oldest motorcycle company in the United States but it was on the verge of financial ruin in the early years of the Great Depression. The company survived through those tough years primarily due to E. Paul DuPont's efforts who took over running the company in 1930. It was during this time that Indian introduced the style of the Indian Chief that many motorcycle manufacturers still copy in their design. The "Chief" was introduced 1922 and it was known for its strength and reliability; but, production ended in 1953.

1936

Harley-Davidson VL

1936 VL Chicago police bike one of 4 restored celebrating the 300 bike tender. 80/34 HP Flathead side valve V-twin engine. One-year-only motorcycle. Beginning in 1929, Harley-Davidson flirted with sidevalve engines in both a response to the popularity of Indian's sidevalve heritage in the Scout and Chief series motorcycles, and perhaps a concession to economics. First came the 45 cubic inch engine, and following in 1930, the 74 cubic inch V series engine.

Sidevalve engines were not as affected by wear and improperly adjusted valves, and were less expensive to mass produce. The 1936 model year for V series Harley-Davidsons debuted several new designs to the motorcycle however it was the final year for this series of engine. New for 1936, the engine barrels and heads both gained greater cooling fins and incorporated improved Ricardo combustion chambers. For the 1936 year, both 74 cubic inch and 80 cubic inch engines were made available as were low compression and high compression engines. While Indian moved to dry sump oiling systems, Harley-Davidson retained a total-loss lubrication and a simple sheet metal primary cover.



Levis D Special

The Levis D-Special was a finely manufactured and durable OHC machine. Levis meant "Light" and described the first machine made by the company in 1911, a two stroke. Levis had sporting success in the 20s with it's two strokes and introduced four stroke designs in the 30s. These were successful machines but were expensive and not powerful enough for sporting success. Levis finally closed its doors in 1941. The four stroke machines used total loss oiling systems and as long as the tank was topped up frequently the resultant fresh oil proved itself with long lasting motors.

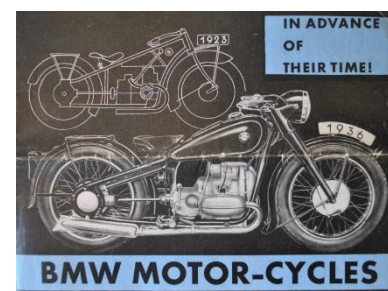


BMW: R4 – 400

This machine was imported from Germany. The engine is from a Machine delivered to a dealer in

Konigsberg in East Prussia in 1936. The frame is from a Machine delivered to a Wehrmacht Artillery Unit in Leipzig in 1936. At some time the components were swapped around, not uncommon during or after the war.

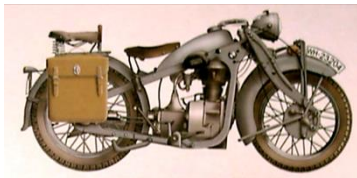
Introduced in 1932 and intended to bridge the gap between the 'budget' BMW R2 198cc single and the expensive twins, the R4 looked much like the former, whose channel-section steel frame and running gear it used almost unaltered. The 398cc overhead-valve engine featured enclosed valve gear and produced 12bhp, gaining an extra two horsepower in 1933 when the BMW R4 was updated to Series 2 specification with revised styling and a four-speed gearbox. A new cylinder head, tidier engine casings and changes to the toolbox and generator locations were introduced as the rugged R4 - a favourite with police forces and the German Army - progressed through to Series 5 before production ceased in 1936. BMW produced 15,295 R4 motorcycles using innovative mass production techniques, setting new standards of design and quality. Pressed steel frame and components were quick and easy to stamp out and assemble, reducing manufacturing costs.



BSA Empire Star

The Empire Star was made by BSA at their factory in Small Heath, Birmingham. Named to commemorate the Silver Jubilee of King George V of the United Kingdom and advertised as The Masterpiece of the Industry, the Empire Star range was produced between 1936 and 1939, when it was developed into the BSA Gold Star and World War II stopped production. Developed from the popular BSA Blue Star and designed by Val Page, the Empire Star range had the benefit of several ideas Page had been developing at his previous employers, Ariel and Triumph motorcycles. With a heavy frame and iron barrelled pushrod valves the Empire Star still had the legacy of the earlier BSAs, however, and Page continued to lighten it and introduce engine tuning ideas throughout production.

The 'Empire' featured an alloy primary chaincase with a special high compression piston and a



hardened cylinder bore. It also had some modern features, including a new foot-change gearbox and dry sump lubrication. BSA launched the range of Empire Star models in 1936 with an effective demonstration of their reliability - a 500 cc model was subjected to an endurance test of 500 miles at Brooklands, averaging speeds of over 70 miles per hour round the track. This was followed by a 1,000 miles endurance ride around the UK, visiting the West Country, Wales and the Lake District. The whole trip was completed successfully without the need for any spare parts - an important selling point for BSA in an

increasingly

marketplace.

competitive

The outbreak of World War II ended production of the Empire Star in 1939 as the BSA factory switched to making munitions and producing the BSA M20 for the British Army.



1937

BSA Empire Star

The Empire Star was made by BSA at their factory in Small Heath, Birmingham. Named to commemorate the Silver Jubilee of King George V of the United Kingdom and advertised as The Masterpiece of the Industry.

During the 1930s BSA concentrated on producing a range of dependable, well-made, competitively priced motorcycles. The firm's single-cylinder range was re-designed by Val Page for 1937, the engines taking on many of the characteristics they would retain in the post-war era, most notably dry-sump lubrication, rear-mounted magneto and that distinctively shaped timing cover.

There were four new offerings in the 350 class: the sidevalve B23 and a trio of overhead-valve models. These comprised the B24 Empire Star, the B26 Star, and the B25 Competition model, which came equipped for trials use. The new engines were housed in conventional cycle parts and drove via four-speed gearboxes, the Empire Star's benefiting from the convenience of foot change. These B-series models lasted until the wholesale revision of the range for 1940, which saw all four dropped.



BSA G14

The first motorcycles made by the Birmingham Small Arms Company in the early 1900s used proprietary engines such as the Belgian Minerva, and it was not until 1910 that the firm introduced a BSA-designed and built machine. The firm's first v-twin - the 770cc (6-7hp) Model E - appeared late in 1919 and would prove the forerunner of a long line of rugged and dependable 'sidecar tugs'. A larger, 986cc version debuted as the Model F in 1922 and would continue in production as the Model G, regularly revised and updated, until 1940, though changes made to the big v-twin during the 1930s were few compared with those made to BSA's singles. The 1937 model still featured hand gear change, oil pump with sight glass and auxiliary hand pump and magneto out in front. By 1937 this machine was dated but still a comfortable and powerful slogger for touring or

work. BSA G14, 1000cc, 25 h.p. at 3800 rpm, max speed 100kmh, weight 191kg.

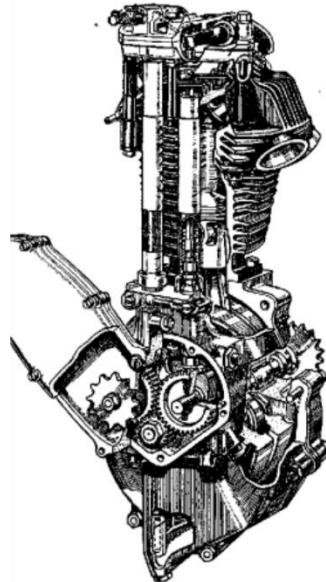
'Police and other public services throughout the world have proved that this machine will give years of hard work with the minimum of attention and expense,' claimed the Small Heath publicists, emphasising the G14's virtues, while Motor Cycling magazine pressed the point that, at £77 in 1937 with the mandatory speedometer an extra, the G14 was far from cheap and few could afford such luxury.



Matchless G8

Matchless is one of the oldest marques of British motorcycles, manufactured in Plumstead, London, between 1899 and 1966. Matchless had a long history of racing success; a Matchless ridden by Charlie Collier won the first single-cylinder race in the first Isle of Man TT in 1907. In 1938, Matchless and AJ's became part of Associated Motorcycles (AMC), both companies producing models under their own marques. During the amalgamations that occurred in the British motorcycle industry in the 1960s, the Matchless four-stroke twin was replaced with the Norton twin. By 1967, the Matchless singles had ceased production. The Clubman models

were OHV models made in 250, 350 & 500cc. For 1937 the Clubman received re-designed motors and quickly detachable wheels. The 1937 model had proved its reliability and performance when 2 machines were entered in the ISDT in Sep 1936 and completed the entire trial without losing a single mark and won 2 gold medals. the Clubman was noted for steering and road-holding and a reasonable high speed for the time. This model follows 30s fashion with exposed valve springs, a twin exhaust port head, but only one (exhaust valve) and upswept trials exhaust pipes.



Norton 16H

Designed by company founder James Lansdowne Norton himself, the long-stroke sidevalve single displaced 633cc, and the new model it powered became known as the 'Big 4'. Smaller capacity versions followed, and in 1911 the 500 adopted the classic 79x100mm bore and stroke dimensions which

would characterise the half-litre (actually 490cc) Norton for the next 50 years.

The 490cc engine was revised for 1914 and in 1921 the Model 16, as it had become known, received a new lower frame, becoming the 16H. Norton's trusty sidevalve would be continuously up-dated for the next 30-plus years, the engine arriving at its final incarnation, with dry sump lubrication and magneto repositioned behind the cylinder, in 1931. Many 16Hs saw service with Allied forces in WW2 before this long-running model took its final bow, in 1954.



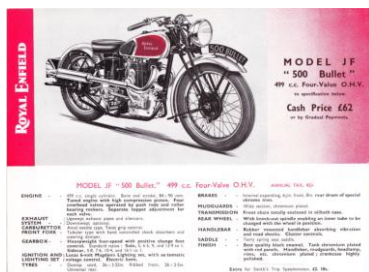
Royal Enfield JF

Extremely rare motorcycle with a 4 valve head 'exposed valves'.

Royal Enfield is arguably the oldest two-wheeler marque still in use, the original company having made bicycles since the 1880s and under the Royal Enfield name since

1898. Perhaps never having quite the glamour attached to sportier makes, the Redditch factory produced many renowned designs up to 1933, when its ohv 'singles' under the name 'Bullet' appeared. 'Made like a gun, goes like a Bullet' being the slogan.

Though Enfield's parts lists and catalogues can be confusing, it seems that the 'JF' Bullet was initially listed with an optional four-valve cylinder-head, in line with makers such as Rudge, but this was later discontinued in favour of the two-valve option, the model being re-titled the 'J2' in 1938.

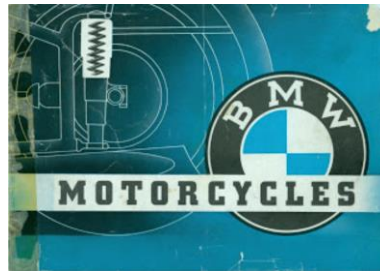


1938

BMW: R66 – 600

Among four new models introduced in 1938 was the one that represents BMW's overhead-valve sports roadster in its ultimate, pre-war form – the R66. Intended as a sporting sidecar mount, the latter joined the existing ohv 500, now typed 'R51', but did not feature the smaller model's two chain-driven camshafts, using instead the single gear-driven camshaft of the sidevalve-engined twins. This new engine went into the updated cycle parts introduced at the same time, which featured a telescopic front fork and plunger rear suspension. Although the sprung frame resulted in the R66 weighing more than its un-sprung predecessors - 187kgs (412lbs) - the exemplary power output of 30bhp more than made up for the increase,

endowing the bike with the top speed slightly in excess of 90mph. In total, 1,669 R66s were made between 1938 and 1941. The BMW R66 would have been one of the most expensive - and exclusive motorcycles on offer in 1938. *Brought from Qld, believed to be from South Africa. At some time hit by gunfire on the rocker cover.*



1939

BSA B24

During the 1930s BSA concentrated on producing a range of dependable, well-made, competitively priced motorcycles. The firm's single-cylinder range was re-designed by Val Page for 1937, the engines taking on many of the characteristics they would retain in the post-war era, most notably dry-sump lubrication, rear-mounted magneto and that distinctively shaped timing cover. There were four new offerings in the 350 class: the sidevalve B23 and a trio of overhead-valve models comprising the B24 Empire Star, the B26 Sports and the B25 Competition model that came equipped for trials use. For 1939 the overhead-valve 350s (either single- or twin-port) were renamed 'Silver Star'. These B-series models lasted until the wholesale revision of the range for 1940, which saw all

of them dropped, thus making the Silver Star one of the rarer of 1930s BSAs.

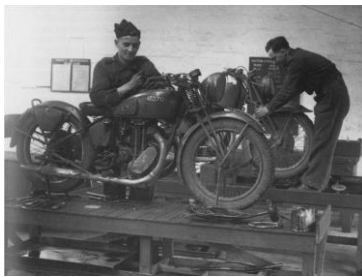


1940

AJS 16M

1931 saw the beginning of a new era for AJS with the acquisition of the old Wolverhampton-based Stevens concern by the London-based Collier Bros. Production was shifted to Plumstead Road and the AJS was built alongside the Matchless products. The Model 26, a 350cc 4-stroke single of some quality, was a new Matchless-style overhead-valve machine introduced for 1935 featuring a vertical cylinder, twin-port cylinder head and forward-mounted magneto. Enclosure of the valve gear had arrived by 1936 and a single-port head - standard on the competition version - became available later. Upon the outbreak of the war AJS supplied a Model 26 for evaluation. It was basically a re-badged Matchless Model G3 and the War Office entered into full production of the 350 OHV single cylinder 350 with AMC for the

duration of the War. AJS quickly morphed some of its models into military versions which it shared with Matchless. Introduced in 1945, the Model 16M was the AJS version of the wartime military Matchless G3L. The models only differ in the position of the magneto, in front of the cylinder on the AJS and behind on the Matchless.

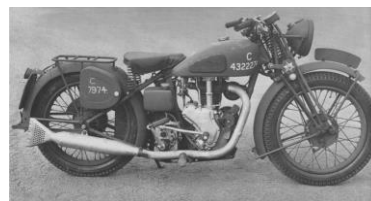


Velocette MDD

In October 1939 a Velocette MAC was purchased by the British War Office Army for testing of its suitability for military use. The tests were successful but a number of modifications were suggested and in 1940 the Velocette MAC was modified into a military specification. Velocette's first order for the military version was from the French Government but the contract for 1,200 motorcycles was cancelled and only a few were delivered before the French were overrun by the advancing German Army. The British War Department asked for some further modifications and took over the French order in June 1940. The Velocette was designated the MAC (WD), the WD coming from "War Department", although it was often referred to as the MDD as this was the prefix for the serial numbers. The MAC (WD) had an upgraded clutch and the pressed-steel front brake drum was

replaced by cast iron fittings which became standard for the later MAC models, due to the shortage of aluminium which was needed for aircraft manufacture. Other modifications included a protective shield bolted to the frame over the crankcase. A strong carrying rack replaced the rear pillion seat and the headlamp was masked to comply with blackout regulations. A later version, the MAF, incorporated service improvements but became too expensive for war-time production.

The MDD could cope well with battlefield conditions, but Velocette's limited production facilities meant it was a difficult to keep up production and by September 1942 the MDD order was cancelled and the factory turned over to other War work. As there were a fairly small number in service both the Velocette MAC (WD) and the improved MAF were largely used by British-based forces, including the Fire Service and Civil Defence organisations, as well as the Royal Air Force.



1941

BSA WM20

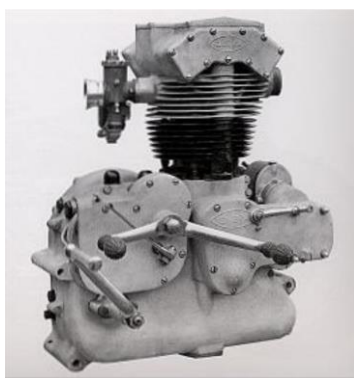
At the outbreak of World War II BSA were Britain's largest motorcycle manufacturer with a

long history of armaments supply to the armed forces. Designed by Val Page the BSA M20 started development in 1937 as a heavy-framed sidecar model with a simple 500 cc single cylinder side valve engine. It had low compression and plenty of low-end torque. The M20 failed on its first submission to the War Office in 1936 due to 'unacceptable engine wear'. Criticised for being heavy and slow, with poor ground clearance it was saved by its reliability and ease of maintenance. As the need for transport quickly gained pace orders were placed for larger quantities. Most BSA M20 motorcycles were used by the British Army but the Royal Navy and the Royal Air Force also commissioned M20's from BSA. Designed as a general-purpose motorcycle for convoy escort and dispatch use, the M20 saw action in almost every theatre of war. After the war the BSA M20 model continued in military service throughout the national service of the 1950s and in smaller numbers until the end of the 1960s, partly due to the low cost and easy availability of spare parts but also as a result of six years of harsh conditions with no serious failures. The BSA M20 was a reliable and affordable form of post war transport, so BSA repainted the khaki WD models black and they became particularly popular as a sidecar motorcycle. The Automobile Association placed a large order and their yellow and black M20 combinations became a familiar sight on British roads. The 1945 wartime cast iron engine continued in production until 1951, when an alloy cylinder head was introduced but otherwise it remained largely unchanged.



Gilera Saturno

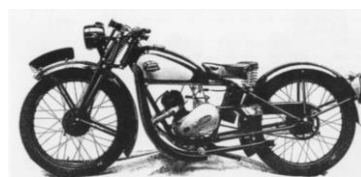
Between 1940 and 1959, Gilera made 6,026 Saturnos. It is in every way the BSA Gold Star of Italy, with an equally illustrious competition history. The Gilera 500cc pushrod single took Italian team members to gold medals in the International Six Days Trial, was a fearsome dirt sled in early Italian motocross events, powered a succession of championship-winning sidecars, served as a rugged military mount, and could be used with impunity as a mile-eating road bike, yet it also won many road races up to and including the 500 GP level. Indeed, the Saturno even won the race it debuted in, the 1940 Targa Florio, carrying works rider Massimo Masserini. That was before Mussolini took Italy into the war, stalling development for the next six years. In the ashes of postwar Italy, full-scale production of the Saturno street bike began in 1946 in Turismo and Sport guises, with the basic version weighing 385 pounds and producing 22 horsepower at 5,000rpm. Many customers bought Sport models and stripped off the street equipment to go racing, so Gilera made a Competizione version, a factory-built road-racing single produced in a special department run by Luigi Gilera, brother of the firm's founder, Giuseppe. The competition model produced 35bhp and could do 105mph.



James ML125

The 122cc ML (Military Lightweight) was a development of a pre-war design (the K17) adapted for military use with the intention that it be airdropped during WW II in the period after the D-Day landings to allow airborne troops greater mobility. The ML was nicknamed the 'Clockwork Mouse'. It is thought that somewhere between 6-7000 Military ML's were actually built between 1943 and late-1944/early '45. It is thought that cancelled WD models were simply built and finished as civilian models for sale from 1945 onwards. They were identical to the standard WD model ML, with the addition of civvy paint, a speedometer, and a longer rear mudguard to accommodate a numberplate. By 1947-48, the

civvy ML had a few more improvements over the WD model, including a different toolbox, lighting, handlebar mounting, etc, but was otherwise essentially the same bike. The ML used a Villiers 9D two stroke engine and carburetor. A 3 speed gearbox was built in unit with the engine. the ML employed a rigid frame with bolted-on rear section and blade-type girder forks with central spring. The gearbox was a Villiers three-speeder with tank-mounted hand 'change while a single sprung saddle and rear luggage carrier were standard equipment also. The model was superseded by the James Comet at the end of 1948.



Catalogue picture of James model K17. The War Office bought similar models for testing.



BSA: WM20

The BSA WM20 was a part of BSA's massive wartime contribution to Britain's war effort. Built from 1937 until the early 50s. The "W" in the model designation signifies that it was built to War Department requirements. It had a rigid frame and BSA's pre-war girder front end. The M20 was designed by Val Page as a sidecar rig, so the engine had low-end torque but was heavy, with low ground clearance & under-powered. It was saved by its toughness, reliability and ease of maintenance and repair. In the end the WM20 was used by the Navy and Air Force & by Commonwealth forces in all theatres of war. Due to its ubiquity, many examples of the M20 are still in operation all over the world.



fitting lights and accessories to make it street legal. A foot operated clutch and hand change three speed gearbox compared with more modern bikes takes a bit of practice to ride successfully.



Harley-Davidson XA

Top speed: 65 mph Power 23 hp @ 4,600 rpm, The Harley-Davidson XA (Experimental Army) was a flat-twin, shaft drive motorcycle made by Harley-Davidson for the US Army during World War II. During WWII, the U.S. Army asked Harley-Davidson to design a motorcycle much like the BMWs used by German forces, with shaft drive, a boxer engine, and several other features that made the BMWs exceptionally reliable and low-maintenance machines. Harley was already producing the WLA, based on its traditional 45-degree V-twin but the army specifically wanted the one feature that the

WLA didn't have: shaft drive. So the company produced the XA, whose engine and drivetrain were based on the flathead BMW R71. 1000 XAs were produced for evaluation. By the time production had begun, the Jeep was the Army's general purpose vehicle of choice. The less advanced but cheaper WLA was considered sufficient for its limited roles. *1 of only 2 in Australia.*



Harley Davidson WLA

The Harley-Davidson WLA was produced to US Army specifications World War II. It was based on an existing civilian model, the WL, and has a 750cc sv engine. About 90000 were made and were used by allied forces across the world including Russia. Production ceased after WW2 but was briefly resumed during the Korean War.

After the war there was a shortage of road bikes so many were bought and adapted for civilian use by fitting lights and accessories to make it street legal. A foot operated clutch and hand change three speed gearbox compared with more modern bikes takes a bit of practice to ride successfully.



1942

Harley Davidson WLA

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1945

MOTO GUZZI - Super Alce

The Moto Guzzi Alce was introduced in 1938, for military use, being replaced in 1943 by the Super Alce. This model was used until 1955, when the Falcone 500 took its place. Carlo Guzzi's first prototype motorcycle of 1919 was unconventional in that its single-cylinder engine was installed horizontally, and by the end of the 1930s the 'flat single' had established itself as a Guzzi hallmark. Guzzis were first used by the Italian Army in the late 1920s, prompting the introduction of a model specifically for military use in 1932. By 1939 4,810 GT17s had been delivered and a lightened, improved 4-speed development, the GT20, was put into service. The GT20 was renamed 'Alce' (Elk) soon after its introduction and would serve as the Italian Army's primary motorcycle during WW2, with over 6,000 being delivered up to 1943. Post-war the Alce was updated with the more powerful overhead-valve engine of the GTV/GTW. This was the Superalce, and it remained in service with the Italian Army and the Carabinieri well into the 1950s.



1946

Harley Davidson EL

1946 Knucklehead rare bike - very hard to find stock examples. The EL 'Knucklehead' is recognized today as an utterly iconic American motorcycle, which set a styling standard so high, it is imitated to the present day. The EL was a completely new motorcycle in 1936, from the frame to the engine, gearbox, and overall

styling. It was the first Harley with a duplex-tube frame, and it was their first OHV V-Twin street bike. The EL also used Harley's first recirculating oil system, and a 4 speed gearbox with a robust clutch. All this uncharacteristic innovation from conservative H-D was styled as a compact and streamlined package. With teardrop fuel tanks, a dash-mounted speedometer, and attractive fenders, the complete effect is of a totally modern motorcycle, and one with huge appeal. Ten years after it was introduced, by 1946 the radical new OHV Harley had evolved into a dependable and well-sorted machine. The Knucklehead has rightly become one of the most sought-after of all Harley Davidson models, and this machine is from a low-production immediate postwar batch of the EL. Only 2098 Knuckleheads were built in '46, as the motorcycle market was flooded with inexpensive ex-military machines, and sales of new motorcycles were still slow. A shortage of chromium in the immediate postwar era can be seen on the "46 Knucklehead, which has painted wheel rims and a general use of paint in place of chrome work, which returned to H-D with their 1947 models. *The bike was purchased of Ivan Billingsley (photo) in 2015 as its presented today, Ivan has been a bike enthusiast all his life and even with failing eye sight he continues to restore motor cycles I ride this bike regularly and has been trouble free a testament to the skill and attention to detail of Ivan in his craft of restoring motor cycles for future generations to enjoy.*



Indian Chief

The Indian Chief was built by the Indian Motorcycle Company from 1922 to the end of the company's production in 1953. The Chief was Indian's "big twin", a larger, more powerful motorcycle than the more agile Scout used in competition and sport riding. In 1940, along with the Scout, the Chief was fitted with the large skirted fenders that became an Indian trademark, and the Chief gained a new sprung frame that was superior to rival Harley's unsprung rear end.

The Chiefs of the 1940s were handsome and comfortable machines, capable of 85mph in standard form and over 100mph when tuned, although their increased weight hampered acceleration. Production of the Chiefs for civilian use was ceased during WWII. When Indian resumed civilian production after World War II, they revived only the Chief line for which new sprung forks were introduced. Production of Indian motorcycles ended with the last Chief made in 1953.





1948

AJS 16M

The rigid framed AJS Model 16M 350 cc single was developed in 1945 from the military Matchless G3/L World War II motorcycle. When Associated Motor Cycles Ltd resumed civilian motorcycle production post-war, the AJS range was rationalised to just two closely related models, both derived from the military Matchless G3/L.



1947

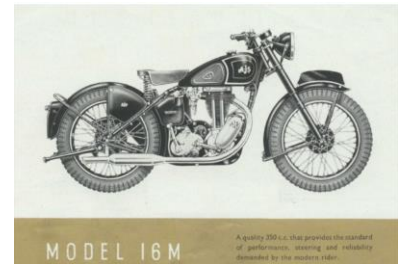
MOTO GUZZI - 500 GTV

Moto Guzzis have always stood out for their original design, and this model is no exception. In 1934, Guzzi began production of the V model. Post-war the V was equipped with rear wheel suspension & it became known as GTV (Gran Turismo V). It was an innovative model for Moto Guzzi, thanks to its higher efficiency, compared to previous models, and more rounded lines. The very first GTV model was produced in several versions until 1947 when it was equipped with a telescopic fork. Later versions of the V engine were used on Astore and Falcone models (the last one was produced until 1967). In total, the V engine was used for more than 30 years, which indicates its efficiency and innovation. *This machine, the immediate post-war model, was purchased in Spain and imported into Australia by the owner. The GTV was never commercially imported into Australia.*



Based on a pre-war design utilising a foot-change Burman four-speed gearbox, drum brakes, patented Teledraulic forks and a rigid rear frame, the 350cc Model 16 and 500cc Model 18 were both introduced in June 1945. The Model 16's air-cooled single, fed by an Amal Type 6 carburettor, developed 16 horsepower at 5600 rpm, enough to push the rider to speeds approaching 80 mph. AJS continued improving the Model 16 over the years, adding the option of sprung rear suspension via hydraulically dampened spring units from 1949 (with the suffix S for springer added to the model designation).

An updated Model 16M, carrying a new dual seat was offered from 1953, while AJS's own gearbox replaced the Burman unit in 1956 and an alternator was introduced the following year. Simple, affordable and easy to work on, the Model 16MS became the mainstay of AJS production through the 1950s, earning a reputation as the working man's motorcycle and remains an excellent choice as a classic British motorcycle, with strong support from clubs and a network of specialists around the world.



ARIEL VH

Val Page's arrival at Ariel in 1925 as Chief Designer would trigger a welcome upturn in the Selly Oak firm's fortunes. Page designed new models to replace the existing range, the first of which - a pair of singles displacing 600cc (sidevalve) and 500cc (overhead-valve) - debuted later that year. By 1930 the Ariel single had gained a rear-mounted magneto and its distinctive timing cover, and the engine's basic design - though frequently revised - would stand the company in good stead well into the post-war era. In 1932 the sports versions were christened 'Red Hunter' and under Page's successor Edward Turner developed into fast and stylish machines.

Coded NH and VH (350/500), the sporting Red Hunters resumed production after WW2 alongside their deluxe NG and VG counterparts. In mid-1946 the Hunters became the first models to feature Ariel's new telescopic front fork, and the following year could be ordered with the optional Anstey Link plunger rear suspension. The Red Hunters were continuously developed - gaining a telescopic front fork, swinging-arm rear suspension, an alloy cylinder head, and full-width alloy hubs in the process - until production of Ariel 4-strokes ceased in 1959. *This machine was extensively campaigned in WA scrambles events in the 50s. Inset photo: outfit at Clontarf in the 1960s. Main photo: Gary Tenardi & Ken Vincent at Albany hill-climb.*



BSA A7

Designed by Val Page, Herbert Parker and David Munro, the BSA A7 was the first of the BSA twin-cylinder motorcycles and was ready for launch in 1939, but the outbreak of World War II delayed the launch until September 1946 when hostilities ended. The very first A7 off the production line was flown to Paris for the first motorcycle show after the end of the war. There was huge demand for affordable transport after the war and the simplicity of the A7 twin was helped along by the slogan 'It's time YOU had a BSA!'. The 495cc twin cylinder engine produced 26bhp and was capable of 85mph. A single camshaft behind the cylinders operated the valves via long pushrods passing through a tunnel in the cast iron block. Most motorcycles of this period tensioned the primary chain by drawing or rotating the gearbox backwards on a hinge with threaded rods, this was known as pre-unit construction. The first A7 featured a fixed gearbox, bolted to the back of the crankcase, and an internal tensioner for the duplex primary chain. This gave it the appearance of unit construction and pioneered the system later

used in unit-construction engines (e.g. BSA C12/C15, BSA B40, Triumph 3TA and on). However, in 1954 a re-design reverted to the older system. The electrics (as was universal for larger British motorcycles of the period) consisted of two independent systems, the very reliable and self-contained Lucas magneto, with a dynamo generator to charge the battery and provide lights. Carburation was a single Amal remote float Type 6 until 1955 when it was upgraded to a 376 Monobloc.



BSA M21

Richard bought the machine in 1974 for 15 quid, worked it over and then rode it from London down to Crete. Did 6500 miles in 5 weeks came back with shoulders stretching off to either horizon as it wrestled with me all the way. The Busmar chair was added in 1989. Could get wifey plus 4 kids in on runs!

Prior to the availability of affordable motorcars, the motorcycle sidecar was the only option for families on a budget throughout the 30s, 40s and 50s. Established in 1950, Busmar of Blackpool specialised in family size sidecars that promised 'saloon car luxury'. Once a common sight on the roads, their fortunes declined drastically in the early 60s as living

standards rose and car production soared. Busmar went out of business in 1965 and very few of their products still survive today. The BSA M21 is the 600cc version of the ubiquitous 500cc M20. The M21 is a long stroke version of the 500 and it meant the factory could use common engine parts. The M21 still used heavier flywheels though, to provide the low rev pulling power needed for sidecar work. Plunger frames were made available as an option in 1951 and offered a greater degree of comfort and handling for the rider. The quick detachable rear hub was re-introduced on the plunger frame. In 1955 production came to an end although new or refurbished military models were still being dragged out of the supply stores into the mid sixties.



1949

BSA A7

BSA A7 - Engine 495 cc (30.2 cu in) straight twin, Bore / stroke 62 mm x 82 mm, Top speed 85 mph (137 km/h), Power 26 bhp, Weight 166 kilograms (366 lb)

After the 1938 launch of the Edward Turner designed Triumph Speed Twin, BSA needed a 500cc twin to compete with the Speed Twin. Designed by Herbert Parker, David Munro and BSA's chief designer, Val Page, the BSA A7 was the first of the BSA twin-cylinder motorcycles. The outbreak of World War II delayed the launch and several prototypes were built during the war years. The model was finally launched in September 1946 when hostilities had ended. The very first A7 off the production line was flown to Paris for the first motorcycle show after the end of the war. There was huge demand for affordable transport after the war and the simplicity of the A7 twin was helped along by the slogan 'It's time YOU had a BSA!'. The range was launched in 1946 using a 495 cc long stroke engine. An improved 497 cc version based on the BSA A10 engine was launched in 1950. The various A7 models continued in production with minor modifications until 1961/2 when they were superseded by the unit-construction A50 model. The Star Twin had an increased compression and sportier cam compared to the standard A7. This machine has twin carbs & also has rear plunger suspension.



BSA Gold Star B32

The post-war BSA Gold Stars were first introduced in 1949, and were versatile and adaptable machines designed for use in all forms of motorcycle competition. By selecting from an extensive range of engine, gearbox and trim options, the owner could prepare his machine for road-racing, scrambles, trials, and even fast touring. Gold Stars predominated in competition throughout the 1950's and early 1960's. This machine is an early 1952 model, which was the last year that Gold Stars were equipped with sand-cast engines and plunger spring frames. They were superseded by re-designed die-cast engines in mid 1952 and swinging-arm frames in 1953.

This machine was purchased in 1952 as a road-racer by Kevin Hart of Mt. Hawthorn, and was supplied by Mortlocks in Hay Street, Perth. It was equipped with a TT carburettor, Lucas racing magneto, racing cams, extra-close ratio gearbox, reversed gear change mechanism, rear-set footrests, straight-through open exhaust pipe, and dual seat. Kevin entered it in the Yanchep Junior Races on 5 October 1952 and 19 April 1953, and the Mandurah Races on 2 November 1952, but did not win any places. The machine was sold to Bob Blackwell of Mt Hawthorn in mid 1953. He entered it the Yanchep Junior Races on 4 October 1953, 4 April 1954, 3 October 1954, and the Bunbury Easter TT Races on 19 April 1954, winning places and fastest times at all these meetings. Bob made a number of

modifications to the machine during its racing days. Some of these have survived, including the modified front fork tubes for clip-on handlebars, and the drilled front brake plate for a ventilated brake. The machine was converted for road use in 1955, and was used as daily transport until the early 1960's. It then changed hands four times until it was acquired in a very derelict condition by Peter Rule in 1974. After a six year restoration, the machine was roadworthy again in 1980.

BSA "SPECIALS"
for the Sporting Rider



BSA 350 O.H.V. Model B32 GOLD STAR



Bob Blackwell on BSA Gold Star at Yanchep 1953



1950

BSA Bantam D1

The Birmingham Small Arms Company (BSA) developed the first Bantam in 1948 and it was based on the German DKW RT 125, a design that was received as war reparations. There the similarity ended for the new design embodied all the latest innovations in contemporary two-stroke technology. Initially it was planned to manufacture an engine/gear unit only and not a complete machine, however this decision soon changed and BSA Bantam D1 was released late 1948. The D1 BSA Bantam soon became the leading British light weight motorcycle outselling all others. It remained in production some 15 years. Over the period of manufacture various options included a plunger type frame, battery and rectified current lighting, coil ignition. Other models followed including 150cc and 175 cc versions. BSA ceased manufacture of the D1 in 1963 with the other Bantam models continuing manufacture until 1971. The iconic mist green finish was used for the D1, however in the early 1950's black was available as an alternative for export models particularly for Australia. Whilst exact production numbers are not available it is estimated that in excess of 250,000 Bantam D1 machines were manufactured.. This machine produced 4bhp@5000rpm. This 1950 D1 Bantam was totally restored in 1988. It was purchased in Perth from the family that obtained the machine from Mortlock Brothers Perth. It has travelled some 16,500 miles (26,500km) since restoration.



Douglas MkIV

The Douglas Engineering company made motorcycles over a 50-year period from 1907 to 1957. Most of their bikes were in-line twins of 350-700cc displacement. From 1907 to 1934 the engines had the cylinders fore and aft. During the first world war Douglas produced around 70,000 motorcycles for the military. In 1934 Douglas moved to a transverse design with the development of the Endeavour, a 492cc model horizontally opposed with shaft drive. From there on Douglas only produced 350cc twins until they stopped motorcycle

manufacture with the Dragonfly in 1957

Douglas had significant racing success, winning the Isle of Man Junior TT in 1912, and both the 500cc Senior TT and the first ever Sidecar TT in 1923. They also had success in Europe, winning the French GP, Austrian TT, Spanish 12-hour race and the Durban to Johannesburg marathon. Douglas were also popular in dirt track racing around the world, dominating this field in the late 20's selling more than 1200 bikes in 1929. They gained significant attention in 1932-1933 when Robert Edison Fulton, Jr became the first known man to circumnavigate the globe on a 6 hp Douglas twin. Fulton went on to write a book on his adventure titled "One Man Caravan". The Mark models 1947 to 1956 are particularly unique, they were refined smooth and comfortable with their transverse-mounted unit construction 350cc twin, 'Torsion Bar' rear suspension and 'Radiadraulic' front suspension. This model is a 1950 Mark IV, 104 of these bikes were imported into Australia in that year, The London Douglas Club recognises that 7 of these bikes remain, this being one of them.





BMW R51/3

An important step forward in the development of BMW's long-running flat-twin occurred in 1936 with the introduction of the 494cc R5. Prior to that the BMW engine had been recognizably related to the first of its type, the 1923 R32, and like those of its (500cc) predecessors, the R5's engine dimensions were 'square' at 68x68mm bore/stroke. However, the overhead-valve R5 engine broke new ground by adopting two chain-driven camshafts, a move that permitted shorter pushrods and higher revs. In 1938 the model was up-dated as the R51, gaining a telescopic front fork and plunger rear suspension, and continued in production until 1940. Following World War II, Germany was precluded from producing motorcycles of any sort by the Allies. When the ban was lifted, in Allied-controlled Western Germany, BMW had to start from scratch. There were no plans, blueprints, or schematic drawings. Company engineers had to use surviving pre-war motorcycles to create new plans. In 1948, BMW's postwar motorcycle production recommenced with the R24 single but it would be another 12 months

before a twin-cylinder model became available again. This was the R51/2 based, as its designation suggests, on the pre-war R51. Improvements incorporated into the R51/2 included a two-way damped front fork, gearbox mainshaft damper and strengthened frame. In truth, the R51/2 was only a stopgap model to get production under way while BMW worked on something more modern. Its replacement, the R51/3, arrived in February 1951 and despite the similarity in designation had an entirely new and much neater looking engine incorporating a single, gear-driven camshaft and crankshaft-mounted generator among a host of other advances.

Power: 24 hp (18 kW) @ 5800 rpm, weight 190kg



BSA Gold Flash

The 650cc BSA A10 Golden Flash was a new design that was developed into a bestselling range of motorcycles right through to the 1962 Rocket Gold Star. Designed by BSA chief designer Herbert Perkins, with former Triumph designer Val Page, who had developed the first parallel 650cc twin, also contributing. The design was based on the existing 500cc A7. The gearbox was bolted to the engine; this was known as a semi-unit engine assembly. The early Golden Flash was a fast machine for its time, achieving over 100 miles per hour in tests in 1950, and covering a standing quarter mile in under 16 seconds. The all-over gold paint scheme gave it its name and made it very a popular escape from post war austerity.

Richard's Uncle Peter Hill bought it from Mortlocks in 1951. The common colour for export Golden Flashes were black. Peter is in his late 80's now, born in Laverton, and lived there all his life. After shaking the salesman's hand, he headed off towards Laverton, via Hay Street. Almost immediately in a collision with an on-coming car, he shot back onto the footpath. The salesman then pointed out that Hay Street was a one way street! The country bumkin then rode his rigid framed bike back to Laverton! He owned a station north of Laverton, and used the bike for mustering. Richard swapped him a DT400 for it, and a Road Rocket. Rego was L242 (Laverton). Richard still has the battered rear plate. Peter on his BSA in inset photo.



BSA Gold Star B32

The Gold Star story began as early as 1927 when BSA offered a tuned version of the 500cc 'Sloper' developing 24 BHP. As these machines were only modified internally, for identification within the factory and whilst in transit they had a temporary star stencilled on the timing cover. During the 30's BSA designer Herbert Perkins introduced a series

of vertical singles, the tuned versions of which were called Blue Star. By the mid-1930s BSA had introduced the Empire Star, initially available in 350cc or 500cc capacities but later offered as a '250'. Resplendent in green with 'star' tank badges, they had been developed under the eye of David Munro and had some similarity to the later Gold Star. On Wednesday 30th June 1937, a specially prepared Empire Star 500 ridden by the great Wal Handley achieved a 100mph lap of the Brooklands circuit on its way to a debut race victory and award of the Gold Star that would give BSA's new super sports model its evocative name. Possibly the most successful production racing motorcycle ever, the post-war Gold Star formed the mainstay of Clubman's racing in the 1950s. In fact, it was the model's domination of the Isle of Man Clubman's TT which led to the event being dropped after Gold Star rider Bernard Codd's 1956 Senior/Junior double victory. Post-WW2, the Gold Star did not return to the BSA range until 1949. First displayed at the Earls Court Show in 1948, the ZB32 Goldie boasted the telescopic front fork first introduced on BSAs larger models for 1946, and came equipped with a new alloy cylinder barrel and 'head. For 1950 a 500cc version – the ZB34 – was added to the range and this larger Goldie was the first to switch to the new die-cast top-end, with separate rocker box, in 1951. The 350 followed suit in 1952 and the pair continued as the 'BB' Gold Stars.



Norton Model 7

The Norton Model 7 500cc Dominator Norton's first vertical twin, was introduced in the late 1940s. Conceived by Bert Hopwood it incorporated several lessons learned from his involvement with other twin cylinder designs; i.e. with BSA at Small Heath, and Triumph at Meriden. Hopwood's Norton twin reputedly ran cooler than its 500cc rivals and, while unable to match the higher rpm of Edward Turner's Tiger 100, Dominators in general definitely "churned more power low-down", together with quite reasonable handling. It should be stated however that the agreeable looking Model 7 was slightly overshadowed once the factory had launched its 88/99 Series featherbed-framed sibling. The new 500cc engine went into the existing ES2 plunger-frame/tele-fork cycle parts, a marriage that necessitated a redesign of Norton's well-proven four-speed gearbox. There were no less than seven parallel twins listed back then by UK factories, from which group the Dommie earned itself a reputation as one of the best.



1951

Ariel NH

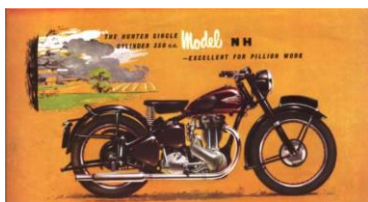
The Ariel Red Hunter was the name used for a range of Ariel single-cylinder motorcycles. They were designed by the firm's chief designer Val Page in 1932 around an overhead-valve single-cylinder engine he developed six years earlier. Originally a "sports" version of the Ariel 500; 250 and 350cc versions were developed and became popular with grass track and trials riders and on the road.

All Red Hunters had a distinctive dark red petrol and oil tanks which were painted in the former Bournbrook cinema opposite the main Ariel factory in Dawlish road. The engines were all run for two hours on a test bench to maintain Ariel's record of reliability and quality control.

The Red Hunter was a success and formed the backbone of the company, and made Ariel able to

purchase Triumph. Edward Turner developed the design further with added chrome and it became a popular touring road bike. Handling was improved by the addition of rear suspension and telescopic forks and the 350 gained an alloy cylinder head from the 1956.

Production ceased in 1959.



BSA Bantam D1

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1971. The iconic mist green finish was used for the D1, however in the early 1950's black was available as an alternative for export models particularly for Australia. Whilst exact production numbers are not available it is estimated that in excess of 250,000 Bantam D1 machines were manufactured.. The machine produced 4bhp@5000rpm.



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covering a standing quarter mile in under 16 seconds. The plunger frame continued to be offered until 1957. From 1950 the Golden Flash was available in black and chrome, but it was the all-over gold paint scheme that gave it its name and made it very a popular escape from post war austerity. The Golden Flash A10 was developed into the Super Flash and Road Rocket, before becoming the 105 miles per hour BSA Super Rocket in 1958. This was nearly the end of manufacture for A10s, but in 1962 BSA produced the BSA Rocket Gold Star, which fitted a tuned A10 Super Rocket engine into the well proven BSA Gold Star single frame. The result was a very rapid machine with excellent handling that became a true classic. This machine is an ex-police model which was popular with the Western Australian Police Force in the 50s.

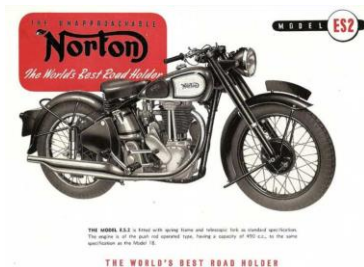


Norton ES2

The Norton ES2 - one owner from new - Lindsay Cooke

The Norton ES2 is a Norton motorcycle produced from 1927 until 1964. It was a long stroke single, always 79mm x 100mm bore and stroke, originally launched as a sports motorcycle but throughout its long life it was gradually overtaken by more powerful models. It remained popular due to its reliability and ease of maintenance, as well as the traditional design. From 1947 the ES2 had an innovative hydraulically damped telescopic front fork and race developed rear plunger

suspension. Top Speed: 82mph, 25bhp @ 5500rpm



Triumph Tiger T100

This machine was purchased new by a policeman in 1952, the sidecar is a 1951 Canterbury.

This locally delivered 1951 500cc Triumph T100 was bought from the original owners son in 2017 as a nearly completed solo. Soon after finishing the bike it was ridden to Melbourne for the 2018 ABR (All British Bike rally) at Newstead. We almost made it. After many mechanical challenges, including waiting for a new primary chain to be delivered from Adelaide to Ceduna, a car rear ended the bike at Bacchus Marsh about 50km from Melbourne thus ending that effort. During the extensive rebuild I discovered the 1951 Canterbury double adult sidecar advertised on gumtree in Victoria. It was the perfect fit for a planned ride to England via Russia and Korea. So began the development, rebuild and painting of the bike and

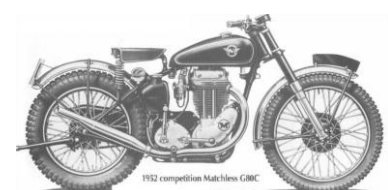
sidecar as you see it now. The rebuilt 500cc all alloy motor pulled the sidecar quite well and in fact was quite nippy for its year. However, a strong wind or a hill highlighted its limitations and for the trip I had in mind would be scarily slow in some circumstances. Fitted with low compression pistons, single carb and meticulously put together with all new parts by John Moss from JMT Classics in Wallaroo SA the bike has been given as good a chance as possible. Covid killed the trip chances.



1952

Matchless G80CS

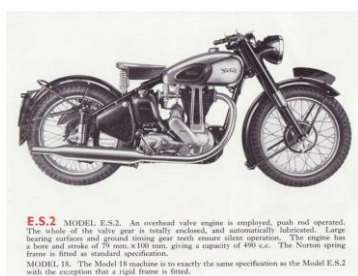
The 1952 "Compy" Matchless is straight from the salad days, when they fought it out with dirt-going BSA Gold Stars, Ariel 500s and Enfields in trials, scrambles and observed trials. The Matchless was keenly sought after by enthusiasts but because of their scarcity, distributors usually allocated them straight to the best riders and required them to appear in every available type of event. At that stage, most dirt men rode converted road machines and so the lightweight "Compy" with its all-alloy motor, spring frame and tractable, reliable power was usually out in front. The G80CS can be distinguished from its predecessors by the forward-sloping timing case (in the AJ5 style), with the magneto in front of the motor. And for the avid: a nickel shortage in 1952 caused all AMC models to appear with silver-frosted wheels. The G80CS was in many respects the same as the road-going G80 Matchless and the Model 18 AJ5 forks, frame, suspension, oil tank etc, were common, with the differences being an aluminium-alloy cylinder barrel, upswept exhaust pipe, alloy mudguards and two-and-a-half gallon tank. The latter is basically the road bike tank with a few inches sliced off the bottom, necessitating strange-looking "pillar" mounts to meet up with the frame bracket, as its position wasn't altered for the "Compies".





Norton ES2

The Norton ES2 is a Norton motorcycle produced from 1927 until 1964. It was a long stroke single, always 79mm x 100mm bore and stroke, originally launched as a sports motorcycle but throughout its long life it was gradually overtaken by more powerful models. It remained popular due to its reliability and ease of maintenance, as well as the traditional design. From 1947 the ES2 had an innovative hydraulically damped telescopic front fork and race developed rear plunger suspension. In 1952 swingarm rear suspension appeared, with Girling shock absorbers. The following years saw many more enhancements - 8 inch front brakes, new cylinder head, new electrics with coil ignition and in 1959 a Wideline Featherbed frame followed by the McCandless Slimline in 1961. Production ceased in 1963. Top Speed: 82mph, 25bhp @ 5500rpm



Triumph 6T

This machine has a sprung hub, Triumph's attempt at a rear suspension, issued as an option, comfortable but no damping. Owner acquired incomplete bike from a station near Meekatharra, sourced remaining parts from UK & USA.

The Triumph Thunderbird was introduced by Triumph in 1949 and produced in many forms until 1966. To capture the American market, the 6T Thunderbird used a variant of the earlier Speed Twin's parallel twin engine, bored out from 500 cc to 650 cc to give the added horsepower American customers demanded. The 6T Thunderbird was launched publicly at Montlhéry near Paris, where three standard-production bikes were ridden around a circuit by a team of riders who between them averaged a speed of 92 mph (148 km/h) over a distance of 500 miles. The 1952 Triumph Thunderbird saw a switch from an Amal Monobloc carburetor to an SU Type MC2 carb in the interest of better fuel economy. This setup suited the 650 twin well & remained in service this way until 1959.



1953

BSA Golden Flash A10

One of BSA's most beloved engines, the new 650cc twin joined BSA's 500cc A7 model in 1949. The existing parallel twin architecture was retained for the new A10, with 360-degree crankshaft and single camshaft at the rear of the cylinder block, as was the four-speed gearbox bolted directly to the crankcase in a form of semi-unit construction, and the tele-fork-and-plunger cycle parts. The model was updated with the swinging-arm frame and separate gearbox for 1955 and continued in production until 1962. Ever since the model's introduction enthusiasts have commonly referred to the touring A10 as the 'Golden Flash', even when it was finished in alternative colour schemes.





Indian Chief

No motorcycle is as easily identifiable as a skirted Indian Chief. Penned by Indian stylist G. Briggs Weaver, those iconic fenders are unmistakable and set the bike apart from anything else on the road. For a style so associated with the brand it's surprising that the outrageously valanced fenders didn't make their first appearance until 1940, some 39 years after the company's founding. With WWII looming and Indian increasingly turning to production of military models, though, the Army version of the Chief emerged stripped of its skirted fenders and chromework, finished in olive drab.

After World War II, the civilian Chief made a return, as did the fenders, but by 1953 Indian was in deep trouble. The company's new Dyna-Torque vertical singles and twins, meant to blunt a postwar invasion of highly competent lightweights from England, had teething problems and were dead in the marketplace. That left the venerable Chief to soldier on, a flathead design in an increasingly overhead-valve world.

Not that the proud old Indian wasn't ready for a fight. The motor had been punched out to 80ci (1320cc), an up-to-date hydraulic telescopic fork replaced the traditional girder arrangement, and on the engine's timing side a rounded shroud was meant to impart more of a modern, automotive feel. Styling-wise, the art-deco fenders looked as good as ever, maybe even more so as the front was trimmed back and a

small shroud was added to the headlight area. Still, financially the clock was ticking and Indian was destined not to survive past 1953.



Velocette MAC

In 1933 Veloce Limited augmented its established range of overhead-camshaft models with an overhead-valve 250: the MOV. The newcomer's engine was a 'high camshaft' design with enclosed valves, and the compact and sprightly machine featured a four-speed gearbox incorporating the company's new foot-change mechanism. The following year an overhead-valve 350 built along MOV lines appeared. This was the long-stroke MAC, which was subsequently bored out to create the 500cc MSS. Post-war, the trio of overhead-valve Velos continued much as before with rigid frames and - initially - Webb girder forks. The MAC gained an alloy cylinder barrel and 'head for 1951, as well as Velocette's own telescopic front fork in place of the previous Dowty, and was further updated with a swinging-arm frame in 1953.



BSA BB 500 GOLD STAR

In 1937, a specially prepared Empire Star 500 ridden by the Wal Handley achieved a 100mph lap of the Brooklands track on its way to a debut race victory and an award of the Gold Star that would give BSA's new super sports model its evocative name. Possibly the most successful production four-stroke single racing motorcycle ever, the post-war Gold Star formed the mainstay of clubman's racing in the 1950s. Post-WW2, the Gold Star did not return to the BSA range until 1949. First displayed at the Earls Court Show in 1948, the B32 350cc Goldie boasted the telescopic front fork first introduced on BSAs larger models for 1946 and came equipped with a new alloy cylinder barrel and cylinder head. For 1950 a 500cc version – the B34 – was added to the range, and this larger Goldie was the first to switch to the new die-cast top-end, with separate rocker box, in 1951. The 350 followed suit in 1952 and the pair continued as the "BB" Gold Stars after the new swinging arm frame was introduced in 1953. In 1953 a 500 Goldie OHV, air-cooled, single cylinder motor was quoted at 38bhp at 7,000rpm and once running it was stirring sight and sound.

Clive's Machine has a plunger frame with a BB motor. Clive says it somehow snuck out of the factory without the swinging arm.



1954

BMW 1954 R51/3

Specs: 24 hp, 490cc, Bore and stroke 68mm x 68mm, Compression ratio 6.3:1, Weight 190kg (418 lbs), 6 volt

Art Woldan: The bike will start and run without the battery, so the battery is small because it only keeps the lights bright when it's idling. It has an exposed drive shaft which is rare. Regarding the lever on the drive shaft side of the gearbox, the manual says it's for "quick shifting by hand to neutral under certain conditions", but I never use it. I added a twist grip to the left handlebar so I don't have to bend down to open the choke, but Perth isn't cold enough to use the choke. The choke is part of the air filter. It has gearing and fittings for a sidecar but it's never had one. The front and rear wheels are identical, and you could get a sidecar with the same wheel and a spare wheel so if you had a flat you could change wheels like on a car. BMW made major changes the year after in 1955, like telescopic to Earles forks, plunger to swing arm rear suspension, and exposed to enclosed drive shaft. BMW's had Earles forks until 1969, then they went back to telescopic forks like on this bike.

History: I purchased it in Connecticut, north east USA, and rode it there year round, including in the snow when the weather fooled me! When I finished uni I started work in Los Angeles and rode it there on Route 66 when it was still the primary route to Southern California. For awhile it was my only transport there and I rode it around California, including riding to San Francisco on long weekends. I had it shipped to WA some time after I moved to WA and I take it to VMCCWA events. Parts are still readily available from Munich Motorcycles in Myaree, and I have no hesitation in using it for errands.



BSA: Golden Flash - A10

The BSA A10 Golden Flash was a new design that was developed into a bestselling range of motorcycles right through to the 1962 Rocket Gold Star. Designed by BSA chief designer Herbert Perkins, with former Triumph designer Val Page, who had developed the first parallel 650cc twin, also contributing. The design was based on the existing 500cc A7. The gearbox was bolted to the engine; this was known as a semi-unit engine assembly. The early Golden Flash was a fast machine for its time, achieving over 100 miles per hour in tests in 1950, and covering a standing quarter mile in under 16 seconds. In 1954 a swinging arm frame was introduced and the gearbox was separated from the engine. The plunger frame continued to be offered until 1957. From 1950 the Golden Flash was available in black and chrome, but it was the all-over gold paint scheme that

gave it its name and made it very a popular escape from post war austerity. The Golden Flash A10 was developed into the Super Flash and Road Rocket, before becoming the 105 miles per hour BSA Super Rocket in 1958. This was nearly the end of manufacture for A10s, but in 1962 BSA produced the BSA Rocket Gold Star, which fitted a tuned A10 Super Rocket engine into the well proven BSA Gold Star single frame.



MATCHLESS - 500 G9

This AMC twin appeared in 1948 with 500cc capacity, and was offered as an AJS Model 20 or nearly identical Matchless G9. Originally for export only to the US, the 66 x 72.8mm engine produced enough power to propel the Model 20 to nearly 150km/h. Unlike the more common British bikes the AMC twins were less highly strung and provided their owners years of reliable riding. These were motorcycles that would last over 110,000km before a major overhaul. Designer Phil Walker created an engine with separate alloy cylinder heads on individual iron barrels. The four-speed gearbox was separate and the primary drive chain enclosed in AMC's distinctive 'tin-pressing' cover. Rear suspension was by jampot shocks and the front brake was full width. While the AMC twins were overshadowed by the more glamorous twins from Triumph, BSA and Norton, AMC owners learned to appreciate their machines' superior build-quality

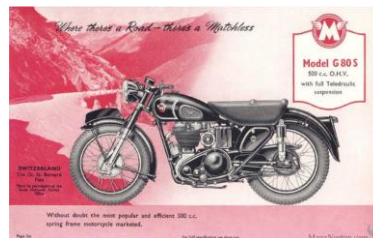
and handling. In nearly every respect the AMC twins embody a near-perfect combination of the attributes sought by many classic bike enthusiasts. The 500cc Model 20 AJS and G9 Matchless were made until 1961. A 600 Model 30/G11 appeared in 1956 and a 650 Model 31/G12 in 1959. Production of all twins ended in 1966. AMC acquired Norton in 1953, and by 1963 all motorcycle production was at Plumstead in London. The company finally went into receivership during 1966, and became Norton Villiers. From 1967 only Matchless survived as the G15 with a Norton engine.



Matchless G80S

1949 was the first year for the G80, the company's top-line 500 single. Typical of British bikes of the era, it used pushrods and a small bore/long stroke (undersquare). The new bike also had a new frame with a swing arm rear suspension, and "Teledraulic" (telescopic and hydraulically damped) front forks. The rear suspension was straight off of one of parent-company AMC's other motorcycle brands. Velocette already had a swing arm suspension setup which used two vertical shock absorbers called "Candlesticks" because they were so thin (they only held 50cc of oil). The design and development work already done by Velocette, it made sense for AMC to use it again on the G80. Because of the poor

quality of the petrol (gasoline) in the UK at the time, British car and motorcycle manufacturers alike produced engines with relative low compression ratios. The 1950 G80 had a 5.9:1 compression ratio. It used hairpin valve springs, changed over from the used of conventional coil springs on wartime models.



Royal Enfield 350 Bullet

Reviving the Bullet name in 1948 Royal Enfield's newcomer featured an overhead-valve engine that housed its dry-sump oil tank in a compartment in the crankcase's rear, to which the four-speed gearbox was rigidly bolted in a form of semi-unitary construction. The Royal Enfield were never a volume seller, but they were among the first, in 1949 to introduce swinging arm rear suspension. The gearbox is made by Albion, and has an extra lever as a neutral finder, standing on this in the top three gears instantly finds neutral and is mainly handy when you've made an urgent stop without having time to change down. The rear wheel is quickly detached, leaving the chain undisturbed though the tyre needs to be flat to get the wheel out. The chain is adjusted via snail cam

adjusters, quick and foolproof. A long running, highly successful and much loved model, the Bullet could be had in road, trials or scrambles versions, with equipment and gearing to suit the application, and there was even a racer in the mid-1950s. The Bullet is a reliable and versatile machine which in modified form is still in production by Enfield India.



1955

AJS 350 16MS

British motorcycles of the 1950's although receiving cosmetic changes and refinements such as front and rear hydraulic suspension, were mechanically in essence of 1930's design – a legacy of the second world war. The 1955 AJS 16MS (350cc) was no exception. The engine was predominantly of the older design but received yearly updates. Examples of such was the fitting of an aluminium head in 1950 and 'High Lift' cams in 1954. 1955 saw the fitting of the new Amal Monobloc carburettor which provided a larger venturi to the earlier standard Amal, enabling an increased flow of fuel to accommodate the larger cams. 1955 also saw the 350cc road-bike joining its 1954 500cc stablemate with automatic ignition advance and the Lucas SR-1 rotating magnet magneto. The gearbox on the bike is the four speed Burman B52, which also appeared on other bikes such as Ariel and Vincent but was known as a Burman GB. In 1949 a swinging-arm frame was introduced initially for export only

but available in the UK from 1950, machines so-equipped being suffixed 'S'. The 1955 AJS 16MS had a top-speed of 78 mph (126 kph) with a fuel consumption of 91 mpg.



Velocette MSS

Velocette's MSS gained a solid reputation pre-war as the company's '500' model. Re-introduced in 1946, the MSS was completely revised for 1953, becoming Velocette's first machine with their all-new swinging-arm frame and 'square' engine of 86mm x 86mm with alloy head and Alfin barrel. The road going MSS continued in production until 1971 being easy starting and tractable.

This Velocette 500 MSS Scrambler is one of a dozen exported to America, sent to Alaska initially and then desert raced before being shipped to Australia and restored.

Based on the MSS the Scrambler has a high compression motor, open exhaust and a reinforced barrel. Whilst a competitive motor

the scrambler suffered from use of a road based chassis and it was not until 1957 that an improved rear frame was introduced to improve handling. Regardless the Velocette was a popular machine fit for purpose in high speed American desert races.



1956

Ariel HS

One of only 229 built. Ariel had much success in Scrambles with the HS 500cc model; the model

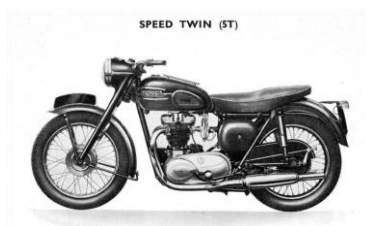
began its life in 1954 and had an all alloy motor and a special frame for competition. The HS shared the same frame as the road going model but it was built with Reynolds tubing, and without many of the standard castings such as the rear pillion footrests. This machine was exported to Johnson Motors in Pasadena California. A Few years ago it was imported into WA from Texas only needing a minor restoration to get it running again. 34BHP @ 6000rpm Weight: 310lbs



Triumph - 5T

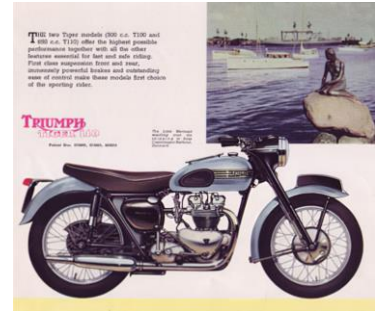
The Speed Twin 5T was made at Coventry, and later Meriden factories. Edward Turner, Triumph's Chief Designer launched the Speed Twin in 1937. It was a 500cc OHV vertical twin in a lightweight frame and the first truly successful British parallel twin, setting the standard for many twins to follow. After World War II the Speed Twin was responsible for the survival of Triumph - and every major British marque offered a 500 cc twin designed on similar lines to the Speed Twin. The 5T Speed Twin model was lighter than many contemporary singles with significantly more power and torque.

After the war the recovery of Triumph at Meriden was largely due to the Speed Twin, which was developed in 1946 with telescopic forks and optional sprung hub rear suspension. The headlamp and instrument area was tidied up in 1949 with the Turner-designed nacelle, a feature retained until the end of the model. Further development led to the 1959 model 5TA with a unit engine and gearbox construction and styling changes including the unpopular 'Bathtub' fairing. The unit 500 engine continued development in the parallel Tiger 100 range ending with the Tiger Daytona models which ceased production in 1973.



Triumph Tiger T110

Every Triumph enthusiast knows that the Bonneville owes its name to record-breaking successes on the eponymous salt flats, but how many are aware that the machine which set a new 650cc production machine record of over 147mph in 1958 was a Tiger 110 equipped with twin carburettors? A development of the Thunderbird tourer, the T110 prototype performed brilliantly in the 1953 ISDT, thus providing the production version - launched later that year - with invaluable publicity. The first Triumph with swinging-arm rear suspension, the T110 came with a revised engine incorporating a stronger crankshaft, high-compression pistons, larger inlet valves and 'hotter' cams. The T110 remained in production into 1961, one of the most important developments along the way being the introduction on this model for 1956 of the aluminium-alloy 'Delta' high-compression cylinder head, which increased power and pushed the T110's top speed towards 120mph.



AJS 500 Model 20

The AJS Model 20 was made by Associated Motorcycles at the former Matchless works in Plumstead, London. The AJS Model 20 and corresponding Matchless G9 were launched at the post war Earls Court motorcycle show in late 1948. Initially for export to the US, it was not until the late summer of 1949 that the first examples reached the home market. The styling was modern and the dual seat, megaphone silencers and bright chrome finish justified the name of Spring Twin. The rest of the cycle parts were standard AMC, with the engine being housed in a pivoted fork frame with telescopic front forks. In 1951, the rear suspension was upgraded to the Jampot unit. Progressively developed, the Model 20's twin-cylinder engine underwent a number of capacity increases, finally being discontinued when the 646cc AJS Model 31 replaced it in the autumn of 1958. The AJS twins may not have been fast but they certainly had a reputation for being well-handling and reliable machines. BHP: 29 Top speed: 85mph Weight: 179kg.





and foot controlled clutch and hand gearchange.



Royal Enfield Bullet

Royal Enfield were never a volume seller, but they were among the first, in 1949 to introduce swinging arm rear suspension. The engine has the crankcase and oil tank cast integral with each other, in aluminium. Cams and magneto are driven by gears and lubricated by a reciprocating plunger pump. They were ahead of the rest here with a fine gauze filter in each the sump and crankcase and a large replaceable felt filter in the timing cover. The gearbox is bolted up fixed to the back of the crankcase, the duplex primary chain being adjusted by slipper tensioner within the cast alloy primary case. Set up right it doesn't leak and it's normal to do big mileages without adjustment, the best in the business. The gearbox is made by Albion, and has an extra lever as a neutral finder, standing on this in the top three gears instantly finds neutral and is mainly handy when you've made an urgent stop without having time to change down. The rear wheel is quickly detached, leaving the chain undisturbed though the tyre needs to be flat to get the wheel out. The chain is adjusted via snail cam

adjusters, quick and foolproof. There's a Cush drive in the rear hub too, much more flexible than that on the clutch and I suspect this difference is why they work well together. Loosening the two bolts securing the top rear suspension units and unplugging the stop/tail wires means the seat and mudguard can be removed in under a minute giving access to the wheel. This I expect was designed with the "Olympics of Motorcycling," The International Six Days Trial in mind. Enfield had an unremarkable history of motor sport but excelled in trials; this included gold medals and team prizes in the I.S.D.T. This bike was bought for \$500 as an incomplete pile of parts off a shed floor in Victoria Park, it's young owner abandoning plans to "modernise" it. It was worth pursuing as 500s don't come up often. It's been a good bike, been to U.K. on two memorable occasions covering thousands of touring miles without missing a beat. It's an easy starter, it's quite light and handles well and will sit on about sixty miles per hour all day, whilst making the sound of a proper motorbike.



Triumph - 5T

Ian bought the bike 25 years ago in pieces on a trailer and restored in last 2 years.

The 1938 Triumph Speed Twin was the first vertical twin to hit the market, and it changed everything. Almost the entire British motorcycle industry rushed to copy their success as soon as the

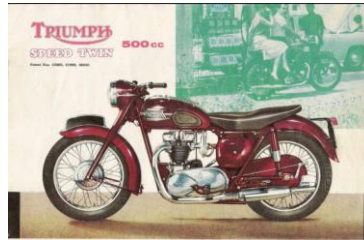
MOTOBECANE - D45S

Motobecane was one of the biggest and longest lived motorbike manufacturers in France. The company was formed in the Pantin region on the outskirts of Paris in the Rue Beaurepaire and the first bike produced was the 175cc MB1 which was a huge success and allowed the company to expand enormously towards the end of the 1920's. The company produced a large and diverse range of bikes during the 1930's ranging from the 60cc Poney to a 500cc in line 4 cylinder bike. After the war the company introduced the D45. A 125cc bike developed from the pre war 100cc AB1 sidevalve bike. It sold in huge numbers and was by far the biggest selling 125cc bike in France for a decade. It had a reputation for reliability, economy and rideability. It featured a hand

war ended. At that moment in time, the 5T Speed Twin was at the top of not only Triumph's model lineup, but among motorcycles of the day, in general. Triumph continued to lead the way, with hotter and more powerful versions, starting in 1946 with the T100 Tiger, which was essentially a 5T Speed Twin with higher compression and hotter cams. In 1950, Triumph bored and stroked the 500 creating the first Triumph 650 twin, the 6T Thunderbird, moving the 500 Speed Twin farther down the ladder. In 1953, Triumph applied "the Tiger treatment" (ie: higher compression and hotter cams) to the 650 and created the 650 Tiger 110. This was followed in 1956 by the 650 TR6, now sporting the aluminum "Delta head", which was followed up in 1959 by the twin-carb 650 Bonneville. The 5T Speed Twin was relegated to Triumph's entry-level heavy twin. They had a 350 twin version also, but those were considered middleweights. That meant that the Speed Twin, which at one time was one of the world's premium motorcycles, had fallen all the way to bread-and-butter commuter. It went unit-construction in 1959, gaining the now-famous "Bathtub" styling, and ran through until 1966.

Triumph implemented a series of improvements on all their twins for 1956. Internally, the old white metal big end rod bearings were replaced with shell-type metal steel-backed thin wall bearings. New connecting rods with larger big-end eyes were needed, which were larger and therefore threw off the crankshaft balance, requiring modifications to the counterbalances. In the interest of added strength, Triumph started using the 6T 650's cylinder block (with smaller bores), which also required the 650s crankcases, to fit the larger spigot. So, from 1956 on, any 500 twin could be enlarged to a 650, as all parts were now

interchangeable between the 500 and 650 twins.



1957

BSA: Gold Star - DB/DBD

Few motorcycles receive truly legendary status but perhaps the most enduring and successful sporting design of all – the BSA Gold Star has. In its final – DB/DBD – form, the Gold Star was a striking looking motorcycle; lean and purposeful, thoroughly British, aspired to by a generation of wannabe stars and café racers, and today a true icon of the industry. Even more significantly, the Gold Star's lineage stretches back to September 22nd 1937, when the model JM24 made its public debut at the Earl's Court Motorcycle Show. By 1955 the Gold Star had evolved to the DB series. The DB was the Goldie in its most recognisable form, GP carburettor, racing style swept-back exhaust pipe and its distinctive silencer. By 1956 the 500 was putting out 42 bhp and breathing through a 1 1/2 inch Amal GP. The 1956 DBD had an alloy tank as an option. The RRT2 gearbox with its extra-close ratios was introduced along with the full-width 190 mm front hub. In this form the Gold Star soldiered on for the next seven years, enduring not just competition from other makes, but the machinations of the BSA board. 1962/63 was the final production year for the model Every Gold Star underwent testing on the factory dyno as well as a thorough road test. The results of these tests were supplied with the motorcycle

when delivered to the owner. This is a motorcycle that rides as well as it looks. A practical classic, to be sure.



Triumph T110

The Tiger 110, known affectionately within the fraternity as the 'Ton-Ten', in acknowledgement of its outstanding performance. A development of the Thunderbird

tourer, the T110 prototype performed brilliantly in the 1953 ISDT, thus providing the production version - launched later that year - with invaluable publicity. The first Triumph with swinging-arm rear suspension, the T110 came with a revised engine incorporating a stronger crankshaft, high-compression pistons, larger inlet valves and 'hotter' cams. The T110 remained in production into 1961, one of the most important developments along the way being the introduction on this model for 1956 of the aluminum-alloy 'Delta' high-compression cylinder head, which increased power and pushed the T110's top speed towards 120mph. This 1957 model exemplifies the continual development of the English twin which develops 42 HP at 6,500 RPM. The model won the gruelling 500 mile Thruxton race of 1958 and a twin carburettor head option clocked 147 mph at Bonneville to set a USA national record the same year.



Triumph T110

Triumph, 1957 Tiger T110 650cc. During the post-war years, Triumph concentrated on the development of their parallel-twin range in both 500 and 650 capacities. All were excitingly roadworthy and trusted by riders, one of the most noteworthy of the range being the Tiger 110, known affectionately within the fraternity as the 'Ton-Ten', in acknowledgement of its outstanding performance.

The 650cc Tiger T110 model was introduced in 1954 to appease the American market when exports accounted for over 50 % of production. A more powerful model was required than the 500cc model twin then available. A development of the Thunderbird tourer, the T110 prototype performed brilliantly in the 1953 ISDT, thus providing the production version - launched later that year - with invaluable publicity. The first Triumph with swinging-arm rear suspension, the T110 came with a revised engine incorporating a stronger crankshaft, high-compression pistons, larger inlet valves and 'hotter' cams.

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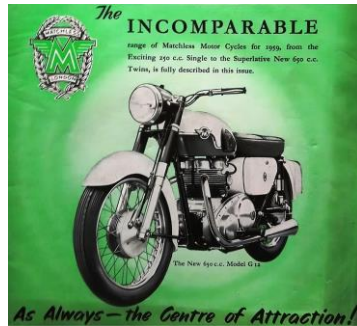
The introduction of the T120 Bonneville in 1959 saw the steady decline & end of the T110 a few years later.



MATCHLESS 650cc G12

In November 1958 AMC introduced the 646cc G12 twin models globally. It included a taller 8 cooling fin cylinder, 1/2" longer pushrods, while retaining the 593cc pistons. This was different to the engine supplied to the USA in 1958 and it replaced the 593cc Model 30/G11. Increased vibrations from the stroked 646cc engine were reported to cause fuel tank cracks so a new 4-1/4 gallon, two half/vertically split, fully welded and rubber buffer mounted fuel tank was introduced. Crankshaft breakages and an abnormal incidence of blown light bulbs also occurred prompting quick AMC reaction to protect their stellar reputation. In 1960 AMC introduced a nodular iron (aka Noddy) crankshaft for the 646cc twin. Breakage issues were cured. New lightweight alloy heads with bigger ports, reduced 40 degree included angle valves and dual rated valve springs were introduced. New modern flat top pistons included a high performance outer perimeter 'squish' area which also reduced tendency for detonation with low grade fuels. Motor Cycle magazine

tested a Matchless G12CSR in 1961 reporting a top speed of 108mph. Norton production moved in 1964 to Plumstead and serious 'Nortonization' of AJS/Matchless models began. By 1965 the model line-up was a jumbled collection of AJS, Matchless and Norton engines. The 646cc models were joined by the 748cc Norton powered twins in standard and CSR form. The end for AMC came in 1966 when it sadly slipped into receivership. In September, Manganese Bronze Holdings took over, renaming the company Norton Matchless Ltd. This later became a part of Norton Villiers who a few years later would also take over the ailing BSA empire, including Triumph, renaming itself Norton-Villiers-Triumph (NVT). The 646cc models were dropped mid-1966, laying the AMC parallel twins to rest and leaving their Norton step brothers to continue but it wasn't long before they too faded into non-existence. *Peter Nicol raced a Matchless G45 in the 50s and buying a G12 was an obvious way of remembering those days and of rekindling his love of these machines. Peter's machine was a pre-release export model sent to Montevideo in Uruguay, before finding it's way to the US and then to Australia.*



Moto Guzzi Cardellino Lusso

Two-strokes did not feature in the Moto Guzzi range until after WW2, when the extraordinarily successful Motoleggera 65 put a whole generation of Italians on two wheels. A larger version of this air-cooled rotary-valve single - the 98cc Zigolo - first appeared at the Milan Show in 1953 alongside the Cardellino (goldfinch), which was a development of the original Motoleggera, retaining the 64cc engine of its predecessor while benefiting from a new, stronger frame. Early in 1956 the Cardellino was updated with a telescopic fork and full-width alloy hubs and later that same year a 73cc version was announced. Further developed and enlarged (to 83cc) the Cardellino remained in production until 1965. Like most Italian lightweights, the Cardellino was light-years in advance of its British contemporaries, being reliable, comfortable, and endowed with excellent roadholding and handling despite rather crude suspension.



1958

Triumph T110

When manufacturing resumed in 1946 after the war, the Triumph model range was, in common with other makers, necessarily limited. With the drive for exports in full flow during the 1940s, Triumph felt the pressure from their distributors in USA for larger capacity machines. The result of this was the introduction of the 650cc Thunderbird in 1949. The 650cc Tiger 110, was introduced for 1954. A modified T110 set a new 650cc production machine record of over 147mph in 1958 at Bonnieville.

The first Triumph with swinging-arm rear suspension, the T110 came with a revised engine incorporating a stronger crankshaft, high-compression pistons, larger inlet valves and 'hotter' cams. The T110 remained in production into 1961, one of the most important developments along the way being the introduction on this model for 1956 of the aluminium-alloy 'Delta' high-compression cylinder head, which increased power and pushed the T110's top speed towards 120mph.



1959

BSA A10 - Golden Flash

The BSA A10 was the inevitable result of the relentless drive for more & more horsepower. Driven mostly by the performance-hungry US market, every British motorcycle maker scrambled to build a 500cc vertical twin after the war, in the mold of Edward Turner's game-changing 1938 Triumph Speed Twin. BSA Motorcycles followed suit with their own 500 twin, the BSA A7 in 1946. It was a fine machine and by 1950, it had proven itself to be sturdy & reliable. But, the pressure was on for more power, always more. BSA Motorcycles put their best men on it, Bert Hopwood & David Munro. They started with an existing model, the 495cc BSA A7 as the template. Externally, the BSA A10 engine looked similar to the BSA A7's engine, in fact, almost everything was different. They took the A7's 62mm bore & 82mm stroke & pushed them out to 70mm X 84mm for a new displacement of 646cc. The bore spacing was wider, so the crank

was longer, so the crankcases were bigger & stronger. The one-piece forged steel crank benefited from BSA's advanced metals division as the rod journals were 'induction-hardened, ground & polished'. The A10 also got 2-piece lightweight alloy connecting rods made of RR56 aluminum. The A10 got an all-new lightweight alloy head with a shallower valve angle, reworked finning for greater airflow & enhanced cooling & a single rocker box instead of two. When the A10 debuted, it carried with it a new 8-inch SLS (Single Leading Shoe) front brake with a 1-3/8" wide hub made of Millenite (a high-grade iron alloy that again came from BSA's able metalworks). But the frames were the same as offered on the BSA A7. The new A10 could be ordered with either the older rigid frame or a plunger frame, until the new swingarm frame arrive in 1954. The first BSA A10 to be introduced in 1950 was the BSA 650 Golden Flash, & it ran through until replaced by unit construction in 1963. After helping write the book on vertical twins in the 1950's, BSA moved forward with plans to abandon it's popular pre-unit twins in favor of a whole new generation of 'modern' unit construction engines. The irony is that while these new engines certainly were better in many ways, they were never as popular as the older units they replaced & BSA began its slow slide to oblivion. The new unit construction BSA A65 650 twin & it's little brother that BSA A50 500 twin never sold in the kinds of numbers that BSA had become accustomed to in the late 1940s & throughout the 1950s.



BSA - A10 Golden Flash

The 1958 BSA A10 Golden Flash...introduced late in 1949, BSA's 650cc A10 twin closely followed the basic pattern established by the 500cc A7 while contriving to be almost entirely different in detail. The existing parallel-twin architecture was retained for the new A10, as was the four-speed gearbox bolted directly to the crankcase in a form of semi-unitary construction.

The cycle parts remained virtually unchanged, though the larger twin's 8" front brake was one obvious difference. Fitted at first only to export models, the 4.25-gallon fuel tank became available on the home market after one year, as did the striking metallic beige finish of the 'Golden Flash' version. By the end of the succeeding decade, BSA's popular 650cc twin had undergone considerable development.

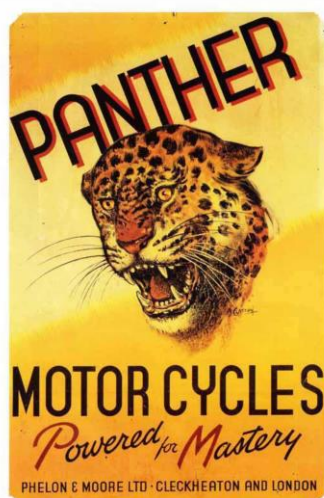
On the cycle parts front, the introduction of a swinging-arm frame in 1954 had resulted in the original bolt-up gearbox's replacement by a conventional separate item, while the engine would undergo numerous improvements before production ceased in 1962.



Panther 120

P&M survived 60 years making a range of machines. They are best known for their heavyweight 600cc Panther 100 for touring & sidecar use. The introduction of the Mini Minor and the retooling costs with the Burman gearbox factory ceasing production along with no magneto supplies saw the demise of P&M in 1963. The basic engine design was little changed from 1928 with innovations being first to incorporate the engine as a stressed frame member, a spare wheel that could be used on the front, rear and sidecar plus a semi-dry sump.

This twin ported 27bhp long stroke single will chuff along at 3000rpm with comfort although the old adage that it fires at every lamp post is well earned. If starting process and energy are well applied the machine starts well, however, there is not much concern about the motorcycle being started and ridden off by the uninitiated!



1960

BSA GOLD STAR

From unremarkable beginnings as a development of the Empire Star for the 1938 sales season, the BSA Gold Star went on to become motorcycling legend. It's one of the most evocative model names in motorcycling – and it endured for a quarter of a century, its production run punctuated by the maelstrom of WWII and brought to an end by advancing technology and production engineering techniques rather than lack of demand for the product. BSA's Gold Star is possibly the pinnacle of the traditional British sporting single's development. And it's one of the most versatile machines to emerge from an industry well known for

extracting the most out of all its designs. In competition, BSA Gold Stars have won on the Isle of Man, short circuits, scrambles tracks, trials sections – and the International Six Days Trial (ISDT). And it's been a road burner par excellence – the darling of the café racer set from the early 50s to the mid-60s. In short, the Gold Star is the consummate all-rounder. This machine was purchased in 1963, Watsonian sidecar fitted 1996, scrambles motor fitted 1969.



BSA A10 - Golden Flash

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Triumph Bonneville T120

In 1937, Triumph introduced the 500cc Parallel Twin. The two-cylinder, air-cooled OHV motor was an instant success, and would prove to be the definitive British bike engine. Engine displacement was increased from 500cc to 650cc in 1950. For 1956, an alloy cylinder head replaced the old iron head, with bigger valves, better flow, and better cooling. It also allowed for higher compressions to be run. The new "Delta" alloy head was originally designed for a single carburetor, but a two-carb version was not far away. Like the existing Tiger T110 model it was based on, the Bonneville T120 was powered by a 650cc parallel-twin, but with two carburetors instead of one. Along with the pair of 1-3/16" Amal Monobloc carburetors, a high-performance camshaft was fitted. This extra power was enough to overwhelm the old duplex chassis, and in 1960 the Bonneville received a new twin-cradle frame. Triumph Bonneville built from 1959 to 1962 had a separate engine and transmission. The crankcase, primary case and transmission were all separate components bolted together with brackets in the frame. These early "pre-unit" Bonneville could achieve 115 mph in stock trim.



1961

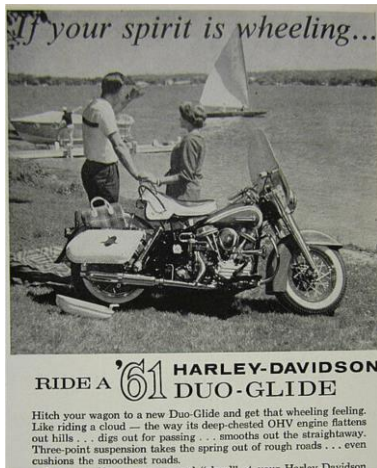
BSA: 500 Gold Star

The DBD34 BSA Gold Star - from unremarkable beginnings as a development of the Empire Star for the 1938 sales season, the BSA Gold Star went on to become motorcycling legend. It's one of the most evocative model names in motorcycling – and it endured for a quarter of a century, its production run punctuated by the maelstrom of WWII and brought to an end by advancing technology and production engineering techniques rather than lack of demand for the product. BSA's Gold Star is possibly the pinnacle of the traditional British sporting single's development. And it's one of the most versatile machines to emerge from an industry well known for extracting the most out of all its designs. In competition, BSA Gold Stars have won on the Isle of Man, short circuits, scrambles tracks, trials sections – and the International Six Days Trial (ISDT). And it's been a road burner par excellence – the darling of the café racer set from the early 50s to the mid-60s. In short, the Gold Star is the consummate all-rounder. .



Harley-Davidson Duo-Glide

The Duo-Glide was so-named because in 1958 Milwaukee's 1200cc Panhead was equipped with both telescopic front forks and a swingarm rear suspension, the latter's action controlled by a pair of outsized, chrome-covered shock absorbers. It was a big step forward in comfort for touring riders, who came to revel in the bike's 'Glide Ride.' Many mounted saddlebags and a windshield, and hit the road bound for points unknown. "Highway...expressway, country lanes, city streets – there's always a smooth road when you ride a Duo-Glide," Milwaukee's ad writers promised. "Solo or with a buddy, you travel smooth as silk – hydraulically smooth from front fork to rear suspension." Also, the 1961 - 1964 Duo-Glides use a dual point ignition system, with one set of points operating each cylinder and powered by its own coil. Both brakes are drum type, with the front brake being cable operated and the rear hydraulic. The FLH series engine puts out around 55 horsepower, allowing a top speed of 100 mph.



1962

MATCHLESS 650 G12 CSR

In November 1958 AMC introduced the 646cc G12 twin models globally. This model replaced the 593cc Model 30/G11. In 1960 new lightweight alloy heads with bigger ports, reduced 40 degree included angle valves and dual rated valve springs were introduced. New modern flat top pistons included a high performance outer perimeter 'squish' area which also reduced tendency for detonation with low grade fuels. Motor Cycle magazine tested a Matchless G12CSR in 1961 reporting a top speed of 108mph. The C.S.R sporting version had a magneto and a compression ratio of 8.5 to 1...a maximum power of 42 b.h.p..at 6,600 rpm. By 1965 the model line-up was a collection of AJS, Matchless and Norton engines. The 646cc models were joined by the 748cc Norton powered twins in standard and CSR form. The end for AMC came in 1966 when it sadly slipped into

receivership. In September, Manganese Bronze Holdings took over, renaming the company Norton Matchless Ltd. This later became a part of Norton Villiers who a few years later would also take over the ailing BSA empire, including Triumph, renaming itself Norton-Villiers-Triumph (NVT). The 646cc models were dropped mid-1966, laying the AMC parallel twins to rest and leaving their Norton step brothers to continue but it wasn't long before they too faded away.



Velocette Venom Clubman

Velocette was a small manufacturer of motorcycles from Birmingham, established a reputation for building high quality, innovative bikes from its inception in 1908. The 500cc Venom and 350cc Viper sports models introduced late in 1955 formed the mainstay of Velocette production for a number of years.

Utilising the ohv four-stroke from the MSS Springer, with bore and stroke measuring 86mm by 86mm the Venom's single had a capacity of 499cc. With an 8:1 compression ratio (this was raised to 8.75:1 on the Clubmans variant) and Amal Monobloc carburettor, new features included redesigned alloy front and rear brake hubs. The new Velocettes certainly looked the part, with chrome mudguards and fuel tank and a very stylish headlamp nacelle containing the speedo, ammeter and light switch. Velocettes were virtually hand crafted in small numbers to the individual requirements of the customer and factory records indicate no more than 537 were made in 1956, the first full year of production. Famously, the Venom claimed the world record for a 500cc motorcycle at the Montlhery circuit in France in March 1961, averaging 100.05 mph for a 24-hour period. The Venom was equally at home in the production racing class, taking out the 500cc class in the prestigious Thruxton 500-mile race for 1964 - to celebrate the achievement, a specially tuned version of the Venom was named after the circuit. Velocette passed into voluntary liquidation in February 1971 but retains a strong following today, with active clubs and specialists supporting enthusiast owners worldwide. *Barry was the lucky winner of a 500 Velocette in 1966, thus becoming the envy of every motorcyclist!*

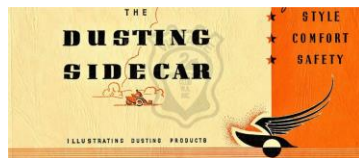




BSA A10

This machine is registered as a 1962 BSA A10R Super Rocket as the crankcase has a Super Rocket serial number. It should have an aluminium head, but has a cast iron one instead." This machine has an enclosed rear chain, which is uncommon. The frame is 1961, the motor 1960, it is obviously a "Bittza Beeza." 646 cc Over Head Valve, 4 speed gear box. A10's were designed by Bert Hopwood and manufactured from 1950 to 1963. They went through several changes during the years. Including upgrades in the clutch, engine and suspension.

Dusting Side car is Australian made outfit from Melbourne. Dusting sidecars were manufactured from the 1930s until the 1950s and were very popular.



1963

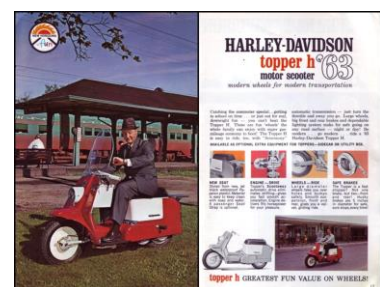
Norton Dominator 650SS

The 650SS Norton Dominator: 'Extremely high maximum speed. Abundant stamina. Pleasant manners. Traditional Norton handling. Full road equipment. Real comfort. That sums up Bracebridge Street's new-for-1962 sporting Dominator 650SS.' – Motor Cycling. Norton launched its first 650cc twin, the US-market Manxman, in 1960. Available in Europe the following year, the Dominator 650 was built in standard, De Luxe and SS variants, all of which, plus the 500SS, featured a new cylinder head with down-draught inlet ports. With 49bhp on tap, plentiful low-down torque and exemplary handling courtesy of its race-proven Featherbed frame, the 650SS was one of the outstanding sports motorcycles of the 1960s, being more than a match for Triumph's Bonneville in terms of all-round performance. Indeed, in February 1962 Motor Cycling achieved a best one-way speed of 119.5mph at MIRA with a 650SS, more than 10mph up on that of the Bonneville tested the previous summer. Towards the end of its test, Motor Cycling took the opportunity to sample the 650SS's stamina. 'Running on 90 at 5,000rpm from the north to the south ends of M1 with only three short baulks which in each case forced the speed down to 35mph second-cog crawl' (those were the days!), Fuel consumption averaged 42mpg and the engine unit remained completely oil tight.



Harley Davidson Topper

The Harley-Davidson Topper was the only motor scooter that Harley-Davidson ever produced. The Topper had a 165 cc single-cylinder two-stroke engine mounted horizontally between the floorboards. The engine required a premixed gasoline/oil mixture. The starter was of the rope-recoil type similar to lawn mowers. The engine powered a continuously variable transmission called "Scootaway Drive." The main complaint from Topper owners was with the "Scootaway Drive" continuously variable transmission. Road grime would get into the transmission and cause the belt to slip. A new transmission, with the primary drive sealed in an oil bath, was introduced for 1961. A detuned version of the Topper was also available, with the power restricted to 5 hp. The Topper was built from 1961 to 1965.



Triumph Tiger Cub

Air-cooled OHV pushrod single,
Capacity: 200cc, Bore & Stroke: 63
x 64mm, 14bhp @ 6300

The Triumph Tiger Cub was a 200 single-cylinder British motorcycle made by Triumph Motorcycles at their Meriden factory. Based on the Triumph T15 Terrier 150 cc, itself a surprise announcement just before the 1952 show, the 200 cc T20 Tiger Cub designed by Edward Turner and launched at the Earls Court show in November 1953. The Tiger Cub was styled to look like a scaled down Bonneville and is a good looking motorcycle which appealed to learners and commuters. The Tiger Cub has aspired performance for its size. The last model made was the T20 Super Cub, which, for economy of production cost, used a basic frame and other parts common to the BSA Bantam D10 including larger diameter wheels with full-width hubs. Launched in November 1966, this last variant of the Tiger Cub was discontinued in 1968.

TRIUMPH



1964

BSA A65 Lightning

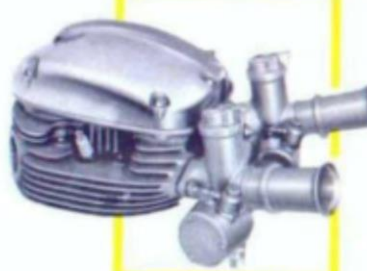

The BSA A65-A50 twins, the A65 being a 650 twin & it's smaller sister-bike the BSA A10 500 twin, were the natural result of the trend, then sweeping the British motorcycle industry, to unit engine construction. When it came to the vital introduction of unit construction motors, BSA unfortunately lagged about three years behind.

The BSA Lightning was designed as the all-round sports machine of the 1960s, planned largely for export to the US market to complement the touring Thunderbolt and the later development, the supersports Spitfire. Development of the engine aimed to make it more reliable, quieter and less prone to oil leaks, with top speed sacrificed to improve mid-range and rideability. Nevertheless, with twin carburetors the A65L could still reach 108 mph

BSA's 650cc A65 sold across the globe in tens of thousands; its rugged engine also evolved into the definitive mode of propulsion in the hyper competitive world of European sidecar racing. By 1965 this machine had become the Lightning which was a natural design progression aimed at the American market.

LIGHTNING Rocket (MODEL A65-2L)

NEW 40 cu. in. Speedster with double carburetor head



New twin-carburetor, high-compression cylinder head.
New full-race camshaft.
High-compression pistons, large valves, racing springs.
Heavy-base cylinder block, husky oversize bearings.
Full sports set-up with chrome fenders, 8,000 r.p.m. tachometer on twin mount with speedometer.
Extra chrome throughout.

MORE EXCITING LIGHTNING FEATURES

New fast-acceleration gearing with improved high-alloy steel gears.
Dual ignition with twin points for best high-r.p.m. performance and power.
Super-Finish—New mandarin red tank and side nacelle panels, chrome fenders with many other parts in sparkling chrome or highly polished alloy.
New sports set-up includes racing tank, sports fenders, sport type headlight, forks with dust covers, chrome chain guard, improved racing brake and many other new features. Ask your dealer for full details.



BSA WINS
100 MILE NATIONAL
CHAMPIONSHIP
Lanonia, N.H. 1963

Aermacchi (Harley Davidson) Ala Verde 250

The 250cc Ala Verde motorcycle was built by Aermacchi after Harley Davidson bought up 50% of the stock in the company. The Ala Verde came out in the late 1950's designed by chief engineer, Alfredo Bianchi. Ala Verde means "green wing". While it has the Harley Davidson name on it, this model was never imported into the US. It has an 85 mph top speed and excellent handling, with styling to match. It has an air cooled OHV horizontal single cylinder engine with circa 21 HP and a 5-speed gearbox.



BSA C15

BSA acquired the Triumph marque at the start in 1936, and the BSA C15 250 cc four stroke was derived from the 200 cc Triumph Tiger Cub, itself coming from the 150cc Terrier. Edward Turner became head of the BSA automotive division and in 1958 BSA introduced the concept of unit construction, where the engine and gearbox were combined in one piece rather than as separate components. The BSA C15 'Star' was the first unit construction model and proved more reliable and economical than its predecessor, the BSA C11. The C15 also had a completely redesigned frame and the 250 cc C15 engine also exploited an advantage of being the biggest capacity motorcycle a learner rider in the UK could use before passing a motorcycle driving test. The engine had an iron barrel and alloy head with overhead valves operated by pushrods which ran in a separate tube to fully enclosed rockers. The camshaft was geared directly to

the crankshaft which had skew gears driving a shaft with the points at the top and the oil pump at the bottom. The alternator was to the left and the primary drive was via a duplex chain to a multi plate clutch. The four speed gearbox was at the rear of the vertically split crankcase. The frame was single loop with twin rails under the engine and pivoted fork rear suspension, and both wheels were 17 inch with full width cast iron hubs. An oil tank was under the seat on the right matched by a toolbox on the left. Between them was an ignition switch panel hiding the battery. The headlamp was fitted in a nacelle which also housed the instruments and switches as was fashionable at the time. Deeply valanced mudguards were fitted to the standard model, making it look heavier than it actually was.



Honda: C77 305 Super Sport

Honda's first model to make an impact in the middleweight class, the CB77 arrived in 1963 and was essentially an over-bored CB72 250, closely resembling its progenitor. Introduced in 1960, the twin-cylinder CB72 had retained the basic layout of the preceding C70 and C71 but with wet sump lubrication and gearbox-mounted clutch.

In addition, the sporting CB changed to a 180-degree crankshaft and twin carburetors and used a tubular spine frame instead of the pressed-steel chassis of the tourers. With an overhead-camshaft engine, electric starter,

rev counter and twin-leading-shoe front brake, the CB twins boasted a specification unmatched by any of their rivals.

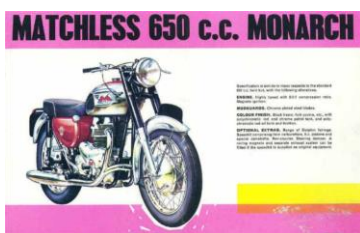
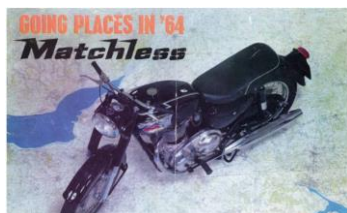
They were no slouches either: producing 28.5bhp at 9,000rpm and weighing just 350lbs, the CB77 possessed an excellent power-to-weight ratio, endowing it with a level of performance equal to that of most British 500s. The model is now one of the most sought after of early Japanese classics.



MATCHLESS 650 G12

In November 1958 AMC introduced the 646cc G12 twin models globally. This model replaced the 593cc Model 30/G11. In 1960 new lightweight alloy heads with bigger ports, reduced 40 degree included angle valves and dual rated valve springs were introduced. New modern flat top pistons included a high performance outer perimeter

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Triumph Thunderbird 6T

When the 6T Thunderbird launched in 1950, it was the first Triumph 650 and was the largest British-made parallel twin at the time. A true hot rod in its day it was designed to capture the American market. The 6T Thunderbird was launched publicly at Montlhéry near Paris, where three standard-production bikes were ridden around a circuit by a team of riders who between them averaged a speed of 92 mph (148 km/h) over a distance of 500 miles (800 km). All three machines were ridden to the circuit and back to the Meriden factory. Triumph obtained further lasting publicity with Marlon

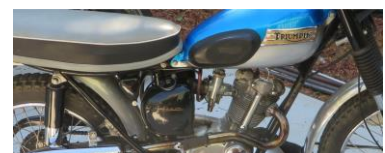
Brando's 1953 motion picture *The Wild One*, in which he rode a 1950 6T Thunderbird. Triumph boosted it with higher compression and hotter cams and created the T110 Tiger in 1953, then stuck a second carb on in 1959 creating the legendary Bonneville. What once was the fastest bike that Triumph built, now was their entry-level 650. It was still a fantastic bike, well-developed by this time, but nearing the end of its life. From 1960, the Thunderbird acquired Turner's rear fairing nicknamed the 'bathtub' on account of its shape. This unpopular feature, dropped quickly in the USA market, remained in ever-abbreviated forms for the home market until disappearing altogether for the final year of production. In 1963, the Thunderbird was given the Turner-designed unit engine. As well a new frame with a single front downtube replaced the 'flexy' duplex frame, virtually eliminating all the handling problems overnight. From this point on, Triumph Motorcycles would gain a reputation as some of the best-handling motorcycles in the world. 1966 was to be the last year of production for the Thunderbird. Throughout the 55 years since the release of the Unit Construction Triumph 650 twin, it remains one of the most attractive motorcycle engines in history. It's clean, well-defined lines are distinctive & instantly recognizable. Air-cooled OHV vertical twin, 649cc, 42 hp @ 6,500 rpm, 165 kg, 60mpg, 95mph. A soft and smooth tourer for its time.



Triumph Tiger Cub

The Sports-Mountain Cub. T20M - air-cooled OHV pushrod single, Capacity: 200cc, Bore & Stroke: 63 x 64mm, 14.5bhp @ 6300

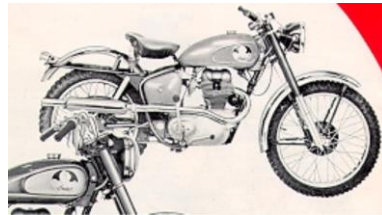
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BSA: C15

The BSA C15 was a 250 cc single-cylinder ohv motorcycle manufactured from September 1958 until 1967, and was BSA's first four-stroke unit-construction bike. BSA acquired the Triumph marque in 1951, and the BSA C15 250 cc four stroke was derived from the 200 cc Triumph Tiger Cub, itself coming from the 150cc Terrier. Edward Turner became head of the BSA automotive division and in 1958 BSA introduced the concept of unit construction, where the engine and gearbox were combined in one piece rather than as separate components. The BSA C15 'Star' was the first unit construction model and proved more reliable and economical than its predecessor, the pre-unit BSA C11. In 1967 the 250 cc C15 was succeeded by the BSA B25 'Starfire' and BSA C25 'Barracuda' models. Power: 15bhp @ 7000rpm Transmission: 4 Speed

WALLABY was announced as "the least glamorous model to be made by Royal Enfield". Based on the RE Crusader, Hounds Arrow and the RE trials bikes, the number of bikes dispatched to Australia is between 10 or 12, making this a very rare machine. They came standard in orange.



1965

ROYAL ENFIELD - 250cc Wallaby

In 1959 South Australian Frank Johns, the owner of Liberty Motor Company Adelaide, was looking for a farm bike, so with Ken George (WA) they approached Royal Enfield to build a "farm bike," thus in the British press in April 1964 the



BSA C15 FT Pastoral

In September 1958 BSA introduced a new '250' that would provide the basis for an entire range of singles in capacities up to 500cc. This newcomer, the C15, featured a compact overhead-valve engine and unitary four-speed gearbox. Alternator electrics and coil ignition were features, early models being distinguished by a distributor-type points housing. The engine/gearbox unit was housed in a conventional cradle frame with bolt-on rear subframe. Trials and scrambles versions were offered as the range expanded during the 1960s. With its heavyweight B32 and B34 models becoming increasingly uncompetitive, BSA had begun developing a trials version for the lightweight C15 '250' roadster in the late 1950s, before the latter's official launch. The trials C15 made its official debut at the start of the

1959 season when Jeff Smith secured a remarkable victory in the St David's Trial. Paul's machine was imported into South Australia and then went to Queensland. Intended for Aussie farmers, rounding up sheep etc. Basically a C15 Trials with lights. First pic is the condition it was in when Paul bought and lastly the wonderful condition it is in now.



1966

Matchless G80CS

The 500 cc G80 first appeared in 1936 with engine dimensions of 82.5 x 93 mm. It had a twin port head, dry sump lubrication, exposed valves, Burman gearbox and a frame with twin down tubes. At the outbreak of war some of these features had changed: single down tube frame, single port head and full enclosure for its hairpin springs were now specified on the G80. After the war the G80 engine design was constantly upgraded, eventually becoming an over-square 86 x 85.5 mm all-alloy design. Associated Motor Cycles (AMC) established a formidable reputation in off-road competition in the 1950s, winning the British 500cc Moto-Cross Championship on four occasions with the relatively lightweight and well-

handling G80 scramblers. In the USA, desert race victories by riders such as Walt Fulton and Bud Ekins ensured a healthy demand for AMC's Matchless G80CS and AJS 18CS scramblers. Housed in a rigid frame with Teledraulic front forks, the ruggedly built overhead-valve engine drove via a four-speed gearbox. Hairpin valve springs were adopted for 1949 and a swinging-arm frame introduced, the latter initially for export only. Models so-equipped got the suffix 'S'. A new duplex frame appeared for 1960 and there were further engine improvements as AMC continued to develop its four-stroke scramblers to the end of production in 1969, but by then the days of such heavyweight machines were at an end. New for the 1966 model year were a new gear-type oil pump, even more improved bottom-end and extended Teledraulics forks. The petrol tank is finished in candy apple red and the bike is fitted with a Lucas Competition Magneto



Norton SS Dominator

In 1962 Norton released their definitive 650 twin, the sporting 650 SS (sports special). Designed by Bert Hopwood in 1948 to counter Triumph's now decade old Speed Twin. Unlike the Triumph, Norton's twin had a single camshaft, positioned in front of the engine, but the two overhead valves per cylinder were still operated by pushrods and rockers. The Model 7 was a long stroke design and as it grew in capacity this characteristic remained. Combined with the Fetherbed frame, Norton Roadholder forks and Girling shock absorbers, the handling for the day was

exemplary. The 650 SS rolled on a pair of 19-inch wheels and stopped courtesy of a pair of full width drum brakes. Compact, low, and functional, Norton finally hit the nail on the head with the 650 SS. Coinciding with the height of the rocker era, at around 180kg the 650 SS weighed little more than a 500 twin. Norton 650 SSs were extremely successful production racers, winning the Thruxton 500-mile production race from 1962 through until 1964.



1967

Bultaco Metralla

Bultaco was founded when Francisco Xavier Bulto resigned from Montesa in 1958. Montesa wanted to withdraw from racing; Bulto disagreed taking the racing department with him to set up Bultaco. By the spring of 1959 their first machine was ready for production. In production machine racing, the 200cc Metralla sports roadster quickly became competitive, winning its class in the 1963 European Grand Prix

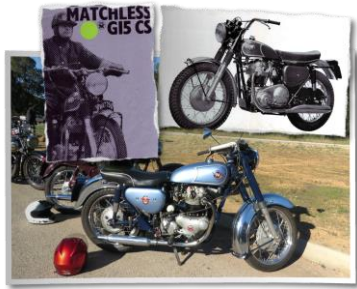
d'Endurance series. By 1967 the Metralla was available as a full '250' and in that year's Diamond Jubilee TT in the Isle of Man a team of race-kitted bikes finished 1st and 2nd, Bill Smith leading Tommy Robb across the line with Kevin Cass in 6th place. The single cylinder 2-stroke put out a quoted 27bhp at 8,700rpm which with its 5-speed close ratio gearbox (and enclosed rear drive chain) gave a genuine 100 mph. The Metralla's oil mixing system is rather unique. Some bikes require a mixing cup when refueling. Others use an oil-injection system to meter oil and fuel as it's used. Instead, the Metralla has an oil mix tank with a plunger. When refueling, give the plunger a few pumps, and the oil is precisely measured into the fuel tank. Bultaco would continue building the Mk2 until 1975, when it was replaced by an updated model. In total, approximately 5,000 Metrallas found owners, at an original price of around \$600.



MATCHLESS G15

Following the handful of G15s built for export only in 1962 and fitted with AMC's own 750cc engine, the concept was revived in the middle of the decade using the Norton 750cc Atlas engine in the existing Gmatchless 12CSR frame. By this time Norton production had been shifted to AMC's Plumstead factory, and in a further move towards product rationalisation, the new G15 roadster (and similar AJS Model 33) was fitted with Norton hubs and Roadholder forks.

CSR sports roadsters and trail-styled CS models followed soon after, and these Norton-powered models were the only AMC twins left in production by the end of 1966. Manufacture ceased the following year and today these relatively rare AMC/Norton hybrids are becoming increasingly collectible.



BSA B44 Victor Roadster

The BSA B44 Shooting Star was similar to the BSA C15 and shared many of the same parts. A weak point of the BSA 250 and most 350 unit singles were the big end bearing and timing side crank bush. The B44 and later B50 had double needle roller big end and roller bearings supporting both ends of the crank.

In 1965 an off-road motocross BSA B44 named the "Victor" was launched at the Earls Court Show. Developed from scramblers used by Jeff Smith to win the 1964 and 1965 500cc World Championships, followed by the Victor Grand Prix and Victor Enduro models, as well as a road-going version, the 1967 Victor Roadster.

The Victor Grand Prix Scrambler had a displacement of 441cc, and the Enduro model was known as the 441 Victor in the United States. BSA began offering a road version, the B44VR Victor Roadster, in 1967. When that model was exported to U.S. dealers in 1968, the name was changed to the B44SS Shooting Star.

The B44VS Victor Special was also successfully exported to the US between 1968 and 1970. The Victor Roadster (or Shooting Star, a name borrowed from a 1950s-era BSA twin), had a top speed of around 90 mph.

The Victor Roadster of 1967 had a fiberglass tank and side covers, a 7-inch, half-width front brake, and the square-barrel Victor engine. In 1969 the Shooting Star was updated with a steel gas tank and a twin-leading-shoe brake. Victors had impressive power-to-weight ratios that made them ideal for hill climbs. The 9.4:1 compression ratio required a compression release lever for kick starting.



YAMAHA - YR-1

The Yamaha YR1 350cc parallel twin two stroke was Yamaha's first 350, and its engine formed the basis of the successful TR1 and TR2 racers.

The YR-1 was technologically advanced with components such as oil injection, single housing speedo/tach, twin leading-shoe drum brakes (2LS), and aluminum cylinders in cast-iron housing. One of the most unique features of the bike was the ability to have its shift shafts, levers, and rear brakes switched to whatever side the rider was more familiar with.

With 36 horsepower at 7000rpm, the twin 350cc engine surrounded by styling that went head-to-head with anything of the time, made quite an impact at the time. This bike started a lineage of amazing race-bred bikes including the YR-2, YR-3, R-5 and RD.

The YR-1 was replaced by the YR-2 in 1968. Yr-1s impressed on there introduction as Yamaha entered anumber in the Daytona 200 in the USA. They achieved laptimes of 132mph in race trim. Although they placed well down the field this was the beginning of big things for Yamaha.





1968

BSA 750cc Rocket Three

Engine: 740cc triple, Bore / stroke
68 x 70 mm, Power: 58 bhp @
7,500rpm, Weight: 212kg (dry)

The BSA Rocket 3 is something of an anomaly in the history of BSA Motorcycles. Designed by Triumph, (BSA owned Triumph) in their Meriden Plant as the Triumph T150 Trident 750 triple, and morphed into the BSA Rocket 3, both were produced in BSA's Small Heath factory. In 1968 every bike produced was shipped to the USA. For the first year of manufacture, three colours were offered; red, blue and Lime Green. This is one of the estimated 200 that were made. Lime was not a very popular colour! Sadly for BSA, it took so long to get from concept to production, especially because BSA insisted on different engine cases and frame to the Triumph Trident even though both were made by the same company, that the window of opportunity to lead the market had closed. Even though it was the fastest production bike at the time, (a record not beaten until 1971), by the time it launched in 1968, within 4 weeks it was eclipsed by the Honda 750 four. A fine performing machine the triples went on to win racing success taking all three podium positions at the 1971 Daytona. By 1972 however BSA was dead. The Rocket Three motor achieved success as the basis for the Triumph X75 Hurricane but it was all too late unfortunately. If the

bike has launched as planned in 1965 it would have gone down in history as a raging success. Still few bikes sound as good as the Rocket Three and they remain a favourite amongst motorcycle enthusiasts.



BSA B40 Mk2BSA

BSA B40 Mk2...Introduced in September 1958, the unitary construction BSA C15 250cc roadster replaced the outgoing C12 and would provide the basis for an entire range of singles in capacities up to 500cc. The first new C15-based model to feature an enlarged engine was the 343cc B40, an addition to the line-up for 1961. The B40 remained in production until 1965, many seeing service with the British Armed Forces, which ordered 2,000 following an extended reliability test. In addition to the over-bored engine, the B40 also featured raised gearing, a bigger fuel tank, larger (7") front brake, and 18" diameter wheels. Having been initially designed as a '250', the B40 was only slightly heavier than the C15 and enjoyed a superior power-to-weight ratio, which translated into a much-improved performance on the road. When road tested by The Motor Cycle in January 1961 the B40 demonstrated a top speed around 75mph and a miserly fuel consumption of just 86mpg. Additional performance was catered for by a larger front brake. The overhead valve engine would rev to 7,000rpm at which level it generated optimum 21bhp. A number of modifications were

made to the military-specification B40 including a lower compression ratio of 5.0:1; Zenith carburettor; moto-cross, cut-down oil tank; external, cartridge-type oil filter; fork gaiters and fully-enclosed rear drive chain. Paul's machine is a 1968 BSA B40 Military Mark 2. The Mark 2 was only made for about 18 months as in most countries, the military had purchased the Mark 1 and didn't want to hold additional spares, the only substantial order was to the Jordanian army.

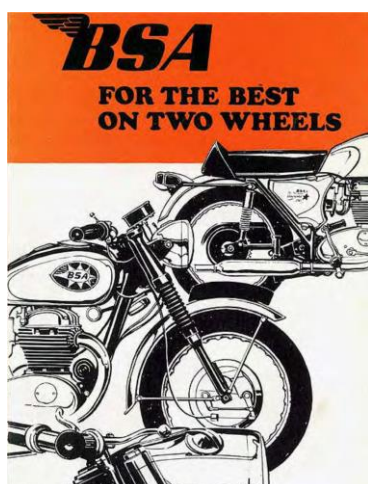


BSA Thunderbolt A65T

At the start of January 1962, BSA announced a new pair of twins to replace the aging A7 and A10. In time, this was to extend to a model range and, in its final form, run into the 1970s and the last days of the company. With the new models came unit construction, less weight and rounder styling, but much of the engineering came from the old twins. The new engine unit presented a smoother exterior to the world, and there were two capacities based on a common stroke with the smaller one of 499 cc for the A50 Star and the larger 654 cc twin for the A65 Star. It did not suffer from the same level of vibration as earlier BSA twins and could comfortably cruise at 70 mph (110 km/h). and reached over 100 mph (160 km/h). in road tests. There was a new frame for the new engine units but along the lines of the past, with single top tube and duplex downtubes which ran round the engine and gearbox. The rear subframe was welded on and the rear fork and other frame

details were much as in the BSA mould.

The range of twins for 1968 all had Concentric carburettors, and the three sports 650s had a twin leading shoe front brake. This went into an 8 in. full-width hub and the cable swept in from the rear to connect to the straight cam lever at the front. There were a number of minor improvements including a longer kick start to make starting easier and metal tank badges to replace the earlier plastic ones, which had a tendency to crack. An Amal Concentric carburettor dealt with the problems of fuel flooding experienced with the earlier monobloc carburettor, by having the float bowl arranged centrally around (concentric with, hence the name) the main jet to remove the sensitivity to fuel surge inherent in all the earlier designs. Stiffer suspension improved cornering but poor quality control and production problems on the BSA assembly line with later models led to oil leaks and rusting parts which damaged the reputation of the Thunderbolt, which was already struggling to compete against the emerging Japanese motorcycles of the early 1970s and production ended in 1972.



BSA 750cc Rocket Three

Engine: 740cc triple, Bore / stroke
68 x 70 mm, Power: 58 bhp @
7,500rpm, Weight: 212kg (dry)

This is a very early version of the BSA Rocket 3 being made in the first year of manufacture. This was the UK motorcycle industries first attempt at a super bike. In that year 1968-69 every bike produced was shipped to the USA. Even motorcyclists in the UK who wanted one were unable to obtain one. This bike was shipped to New Jersey on the 21st October 1968 and retains its original engine. Eventually it was shipped back to UK in around the year 2000 where a restoration was started. The current owner purchased the bike in 2002 partly restored and was shipped to Australia in 2003 where the restoration continued until completed. The shake down period continued for approximately one year until all the bugs and problems were eventually ironed out. The bike is now reliable with bags of power but remains a push-rod engine which can rev to 8,400 RPM. It will reliably cruise all day at over 90 MPH. Where can I do that? It is a heavy bike (because of the engine) and would not be suitable for a small person. You need bags of grunt to get it on the centre stand.



HONDA 305cc CB77

305cc Vertical parallel twin SOHC. Twin carbs, Electric Start with 12v system, Leading shoe brakes front and back. 4 speed gearbox, 28.5bhp, 99mph, 1961-67

Bought by Sydney East from Honda City P/Ltd in Perth where he was employed. Apparently the rear wheel was damaged or missing and Sydney obtained an alloy rim for it and fitted it. I bought it from Sydney in 1978 and used it daily to commute to the city for work. It was laid up in 1982 when I went to work offshore. It was made roadworthy again in 2006 and it is now under a club license with the VMCCWA rego 1CP197 from 03/11/06. Details of work done are kept in a working logbook that stays in the workshop where the bike lives. A large quantity of CB72 spares were purchased at the VMCCWA swap meet on April 1 2007 from Brian Donovan, he races a CB and brought these parts over from UK but had to sell them due to moving house.

The CB77 had, at only 305cc, a relatively big engine in comparison to most other Japanese bikes of

the period, although it had performance to rival much larger motorcycles from other countries. It quickly built a reputation for reliability, and was equipped with luxuries such as an electric starter. The CB77 was built on the experience Honda had gained in Grand Prix racing, and differed greatly from previous models. It had a steel-tube frame instead of the pressed frames of earlier Hondas, and a telescopic front fork. The parallel twin engine, the biggest then available in a Honda, was an integral element of the bike's structure, providing stiffness in a frame that had no downtube, and was capable of 9,000 rpm. It could propel the bike at over 100 mph; as fast as British parallel twins with higher displacements, and with great reliability. Author Aaron Frank called it, "the first modern Japanese motorcycle... that established the motorcycle that we still operate under now, more than forty years later."



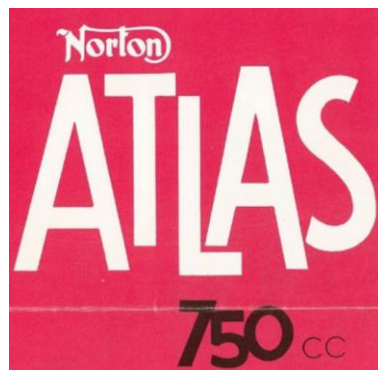
NORTON 750 Atlas

The 1968 Norton 750 Atlas was the last Norton model to feature the Featherbed frame and Roadholder forks. Designer Bert Hopwood's 1949 497cc Dominator engine had been bored and stroked over the years to 745cc, via 600cc and then 650cc versions, to appeal to the American market and initially was only produced for export.

The styling was aimed at the US market with high-rise handlebars, small 2.5-gallon petrol tank and valanced chrome mudguards and chain guard. The look was completed with a heavy-duty

WM3-18 rear wheel, and a Lucas Competition magneto was supplied as standard. The engine had lower compression than the Dominator (at 7.6:1) and was fitted with a single 376 Amal monobloc carburettor giving 55 bhp (41 kW) at 6500 rpm. However the design produced excessive vibration at high revs, so the compression ratio was reduced.

The Atlas shared many cycle parts with the last of the Dominator twins and had Norton's four-speed gearbox and heavy-duty clutch. In 1964 the Atlas was upgraded to 12-volt electrics, and gained a second carburettor and wider fork yokes. A UK version was launched with flat bars and twin instruments. The Atlas continued to be built until 1968 but by then the Norton Commando had begun production and the engine soldiered on for another 10 years.

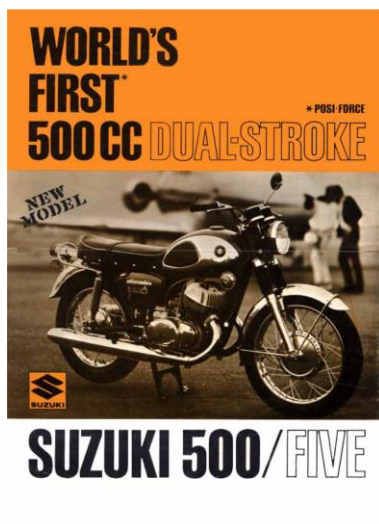


SUZUKI T500 Cobra

"The bike which couldn't be built - the Suzuki 500cc Dual Stroke". So went the proud boast of the Suzuki advertisements of the late 60's. For a buying public conditioned to two-stroke BSA Bantams and Villiers engined motorcycles, the 500cc Cobra twin was simply too large to run without seizing. The Suzuki Cobra was a relatively simple two-stroke which utilised the same 70mm bore and 64mm stroke as its 250 trail-bike cousins were to use (and in turn as the 750cc water-cooled triple would also use). The Cobra had a true capacity of 492cc and a mild compression ratio of 6.6:1 but still managed to produce 46hp at 7000rpm.

The Cobra produced this power through a whopping great pair of 34mm Mikuni carburetors - the biggest the company had ever used to date. one of the pleasant discoveries of riding a 500cc Suzuki twin is to find that theories of buzzing two-strokes do not apply to this engine. The Cobra produces readily usable power from low revs and does not need, nor necessarily like high revs, in order to obtain a good rate of knots. The Cobra puts out 37.5 lb ft of torque at 6000rpm, compare that to the contemporary BSA 650cc Lightning which produced 39 lb ft of torque - at 5750rpm. The Suzuki copes well with touring pulling 3000rpm at 50mph and 4000rpm at 65mph. The Suzuki indicates 80mph at

5000rpm and the engine feels comfortable at these speeds and not at all fussed. The bike will top at least 110mph. The Suzuki 500 was taken to the Daytona 200 mile race in 1968 and in a very mildly modified form it proved fast and reliable finishing 5th and 9th out of a field of 80 machines. For 1969 the styling was radically changed to update it and the T500 Titan was born which went on to become a long lasting and popular touring machine.



Suzuki Land Speed Racer 1968 Suzuki T500

This machine, built by Nic Montagu with the assistance of Murray Barnard, was entered in the Australian Land Speed Records Event held at Lake Gairdner in 2016. The bike ran in the 500cc modified, petrol, unfaired class. Attending the Land Speed Records event run by the Dry Lakes Racing Club is an arduous exercise as it requires a Return 5,000km trip from Perth to Lake Gairdner in South Australia and enduring 8C, dust, flies and salt. The Lake is 160kms from the nearest sealed road. Bring your food and water!

The machine is a Modified Suzuki T500 with lengthened swingarm and offset forks. The motor has been tuned to TR500 racing specs and is capable of at least 60bhp @ 7000rpm and a Potential speed of 135-140mph. In 2016, Nic was the rider and was restricted to the short track which is limited to 125mph. Nic set a New speed record for the class of close to 124mph, raising the record which was previously set at 104mph.

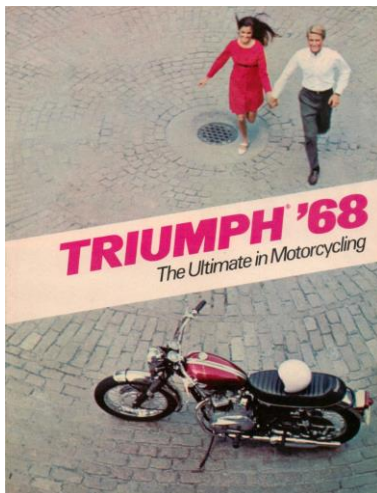
Much of the machine was fabricated or modified by Nic Montagu. Nic made the expansion chambers to race specs and modified the frame and engine for racing on the salt.



Triumph Bonneville

The Triumph Bonneville is a parallel-twin four-stroke engine and manufactured in between 1959–1983 and 1985–1988. The original Triumph Bonneville was a 650 cc parallel-twin motorcycle manufactured by Triumph Engineering and later by Norton Villiers Triumph. It was based on the company's Triumph Tiger T110. For 1968 2 major improvements were made: Amal Concentric carburetors replaced the Amal Monoblocs; and a new 8" TLS front brake replaced the SLS unit. But 1968 also marked the beginning of a very brief period when the Triumph Bonneville was top of the tree. The 'Bonnie' had reached its zenith and its performance was considered world-class. This was, just before the arrival of the Honda 750, the bike that reset the standard of what "performance"

was and in this new world, the ancient pushrod twin just couldn't keep up. *The Bonnie was the bike to have in the 60s and it set a standard for performance & handling that few could match. By the 70s it was out-performed and let down by poor quality control but campaigned on into the 80s in various forms.*



Yamaha DT1

A Rare bike as it was built in the first batch of what was an experiment to assess the popularity of a combined off road racer and registered road bike. This bike started the whole road/trail

genre and was in production until 1985. This was also the model that Yamaha introduced the Autolube system so 2 stroke oil was added to the mixture mechanically, rather than needing to be pre-mixed. Being the first batch it has some unique identifiers... Pearl White Paint, Grey control cables, Bolted on tank, Square section swing arm, Single bolted tail light brake, Red carby insulator, Tacho is smaller than speedo, Foot Brake and Gear selector can be reversed left to right, Steering damper....all these were abandoned, after the first batch of 5000 bikes.



1969

AERMACCHI 1969 350
Ala d'Oro

Aermacchi 350cc Ala d'Oro Racing Motorcycle - the most highly developed and successful overhead-valve racing single ever, Aermacchi was a relative latecomer to motorcycle manufacture, building its first machine in the late 1940s and the first of its trademark, horizontally-mounted, four-stroke singles - the 175cc Chimera - in 1956.

The Chimera was soon joined by 175cc and 250cc machines, the racing versions of which were christened Ala d'Oro (Golden Wing). Alberto Pagani's 9th place on the 250's Dutch TT debut in 1960 demonstrated the bike's potential, which was confirmed the following week when Pagani finished 5th at the Belgian Grand Prix.

The need for more power led to short-stroke engine dimensions (of 72mm x 61mm) being adopted on the 250 for 1964, by which time a 350cc version had appeared. With increased power came increasing unreliability, necessitating a redesign for 1966 when larger flywheels, modified piston and connecting rod, dry clutch and wider gears were among improvements introduced.

The works concentrated on developing its new 250 two-stroke twin from the late 1960s onwards, but before then had introduced a bob-weight crankshaft, external flywheel and new crankcases with an extra main bearing on its four-stroke single. Although the pushrod Aermacchi never won a World Championship race, it did achieve a number of 2nd places, Alan Barnett's in the 1970 Junior TT being one of the most memorable.

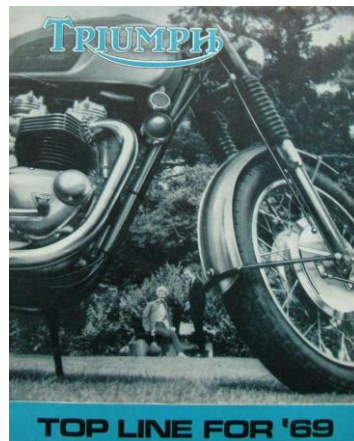
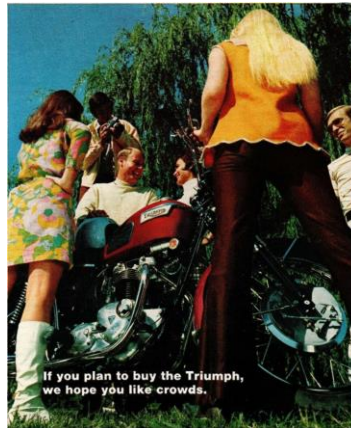
Despite a lack of ultimate success in Grands Prix, the Aermacchi single was outstandingly successful at national level and, having benefited from another three decades of development, remains a competitive force in historic motorcycle racing today. *This machine was bought new in 1969 and raced by the late Ken Duperouzel*



Triumph Bonneville

The Triumph Bonneville is a parallel-twin four-stroke manufactured between 1959 – 1983 and 1985 – 1988. The original Triumph Bonneville was a 650 cc parallel-twin motorcycle manufactured by Triumph Engineering and later by Norton Villiers Triumph. It was based on the company's Triumph Tiger T110. This machine was purchased as a bare frame with 2 milk crates of parts in 1993. Subsequently restored by Dimitrios Vogiatzakis. Dry frame, separate oil tank, 8" TLS drum brake up front, unreliable Boyer-Brandsen ignition replaced with Tristar electronic ignition in 2018. Morgo engine kit installed.

The Triumph Bonneville was the bike to be seen on in the 60s and early 70s. Holder of the world speed record and an excellent performing and handling machine on the road, it had few equals. The arrival of Japanese superbikes in the late 60s knocked it off its plinth and poor quality control dented sales. The Bonneville soldiered on in various guises into the 80s but never regained the iconic status it had in the rocking 60s!



Triumph Bonneville

The T120 Triumph Bonneville - a British made high performance motorcycle built in 1969. It has a vertical-twin, four-stroke, 649 cc engine; with 47hp @ 6700rpm & a top speed of 106 mph. "In 1937 Triumph announced a new bike that took the world by storm. Designed by the famed Edward Turner, the 500cc vertical-twin Triumph Speed Twin was so successful that it set a fashion that was quickly followed by all the other major British manufacturers.

In 1940, during World War II, the Triumph factory in Coventry was blitzed. Production shifted to a

new factory at Meriden. The geographical center of England, where military engines with silicon-aluminum cylinder and head based on the Speed Twin were built. Postwar, a Tiger 100 vertical twin with this design won the 1946 Manx Grand Prix. By 1949, British bikes were becoming popular in the United States, and a special American-market Triumph twin, the 650cc Thunderbird, went into production. Triumph became part of the BSA group in 1951. The Triumph twin enjoyed remarkable sporting success and set world speed records on the Bonneville Salt Flats in Utah.

In 1955, Triumph power set a speed record of 193 mph and in 1962 raised the record to almost 225 mph. Though the record-breaker was a cigar-shaped projectile on two wheels, from then on Triumph named all of its twin carburetor sports bikes "Bonneville" to commemorate the event. The 1969 model was considered the pinnacle of this design with improved braking & carburetion. In the Production TT for 1969 Malcolm Uphill set a 100mph lap on a Bonneville, the 1st on a production machine. The Bonneville remained in production until 1973 in various guises. One of the most famous Triumph models, the Bonneville vertical twin was a high-performance bike with tremendous bottom-end torque and character."



HONDA CB750 KO

The Honda CB750 was introduced to the US and European markets in 1969. Unable to accurately gauge

demand for the new bike, Honda limited its initial investment in the production dies for the CB750 by using a technique called permanent mold casting (often erroneously referred to as sandcasting) rather than diecasting for the engines. This model was known as the KO. As it was, the bike remained in the Honda line up for ten years, with a production total over 400,000.

The CB750 had a transverse, straight-four engine with a single overhead camshaft (SOHC) and a front disc brake, neither of which was previously available on a mainstream, affordable, production motorcycle. Having a four-cylinder engine and disc brake, gave the CB750 a considerable sporting performance advantage over its competition, particularly its British rivals.

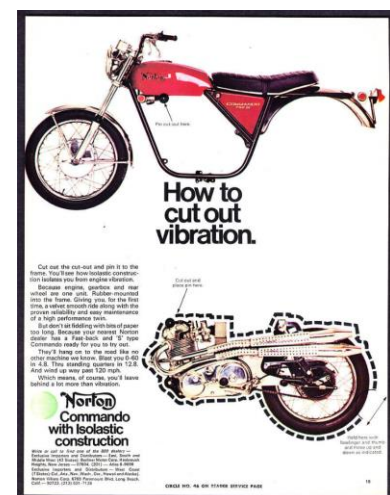
Cycle magazine called the CB750, "the most sophisticated production bike ever", on the bike's introduction. Cycle World called it a masterpiece, highlighting Honda's painstaking durability testing, the bike's 120 mph (190 km/h) top speed, the fade-free braking, the comfortable ride, and excellent instrumentation. The CB750 was the first modern four-cylinder machine from a mainstream manufacturer, and the term superbike was coined to describe it. Adding to the bike's value were its electric starter, kill switch, dual mirrors, flashing turn signals, easily maintained valves, and overall smoothness and low vibration both under way and at a standstill.



NORTON 750 Commando

The Norton Commando was a British Norton-Villiers motorcycle with an OHV pre-unit parallel-twin engine, produced by the Norton Motorcycle company from 1967 until 1977. It had a hemi-type head, similar to all OHV Norton engines since the early 1920s. During its ten years of production, the Commando was popular all over the world. In the United Kingdom it won the Motor Cycle News "Machine of the Year" award for five successive years from 1968-1972. Given that its engine was an old pre-unit design, even Norton's chairman, Dennis Poore, expressed surprise at the

Commando's remarkable success. The origins of the Norton Commando can be traced back to the late 1940s when the 500 Norton Model 7 Twin was designed by Bert Hopwood. The twin-cylinder design evolved into 600 cc, 650 cc Manxman and Dominator until superseded by the 750 cc Atlas before being launched as the 750 cc Commando in 1967. As well as having a radical new frame, the Commando's engine was tilted forward. This allowed more space behind the carburetors for the airbox; and it gave an attractive raked appearance to the motorcycle. The revolutionary part of the Commando, compared to earlier Norton models, was the Isolastic anti-vibration system. By the middle of 1972 BSA Triumph group were in serious financial trouble. The UK Government decided to bail the company out with a financial rescue package, providing it would agree to merge with Norton Villiers. Norton Villiers Triumph was duly formed and the new company got off to a shaky start. The last of the 750 series, the MkV was produced from November 1972 to mid-1973.



Triumph TR6 TROPHY

International Six Days Trial successes in the late 1940s prompted Triumph to adopt the 'Trophy' name for their off-road-styled twins, at first for the 500cc TR5 and then for the 650cc TR6, introduced for 1956. The bigger Trophy retained its sporting character but became more of a roadster as time passed, ending up, in effect, as a single-carburetor T120 Bonneville, whose specification in all other respects it closely followed. More tractable than the Bonnie and more economical too, the Trophy gave little away in terms of outright performance, its standing quarter-mile time and top speed being within a whisker of its twin-carb sibling's. The Trophy continued in this form when Triumph's 650cc twins changed to unitary construction of the engine/transmission in October 1962. Styling and mechanical updates coincided with the Bonnie's from then onwards. However, although the pair possessed an impeccable engine, Triumph's larger models were widely recognized as lacking in the handling department, especially when compared to rivals Norton. Following the wholesale changes of frame layout in the late pre-unit era, a single down-tube design was introduced on the 650cc 'unit' twins for 1963, although even this would undergo several detail alterations over the next eight years. By the decade's end the 650 Triumphs had arrived at what most enthusiasts agree is the models' ultimate incarnation, and today these late, pre-'oil-in-frame' 650s are becoming increasingly sought after by collectors on both sides of the Atlantic.



End – Part 1

