

Telephone 894 Wolverhampton.

A.J.S. MOTOR CYCLES, 1912.

The extraordinary success of the A.J.S. Motor Cycles during 1911—not only in Competitions, but in the hands of the Private Owner—enables us to introduce our 1912 Models with increased confidence. The chorus of appreciation we have received from the Press and Public during the last season, has encouraged us to still further endeavour to produce "The Perfect Motor Cycle," and in our new models we have no hesitation in again claiming that the A.J.S. has no equal in the Trade.

The wonderful demand for our machines made it impossible for us to cope with the rush of orders during the last season, and we crave the pardon of those clients whose deliveries were overdue. We are again extending our Works, and will spare no effort to deliver our 1912 Models promptly, but would ask you in return to place your orders **now**. We tender our sincere thanks to our old clients, and trust the good feeling that exists will continue. Our greatest endeavour has always been to give perfect satisfaction to the rider, both with his mount and our business methods, a policy we shall still try to carry out in the future, knowing that a satisfied client means our further success.

Practically the complete machine is, manufactured in our own works under the direct supervision of our Principals, whose experience in Motor manufacture dates back to 1898. Before we placed a complete Motor Cycle on the market we were engaged in the manufacture of Engines, Gear Boxes, etc., for some of the leading Motor Firms in the World—gaining an experience second to none in the Trade. It is only from practical experience that satisfactory results can be obtained, and our rule of submitting all our productions to a seaching Road Test has enabled us to place before you absolutely the last word in Motor Cycle production,

In June last, machines fitted with the 1912 Engines were entered, and came successfully through the A.C.U. 1,000-miles' Trial, the Liverpool Motor Cycle Club's 200-miles' Reliability Trial, the Birmingham Motor Cycle Club's Reliability Trial from Birmingham to Land's End and back, the A.C.U. Inter-Club Trial, and the A.C.U. October Quarterley Trial, and, as can be seen on the last pages of this list, we had no failures. We do not test our new productions in private; we enter them in Open Competitions so that the public can see how they behave.

INTRODUCTION—Continued.

THE 1912 ENGINE. Space prevents us enumerating all the advantages of our New Pattern Engine. Our greatest claim is that we have at last succeeded in producing an Engine that never gets "tired," and overheating is practically impossible. At a moderate speed on the road, it is possible to hold the bare hand on the Cylinder without discomfort, and the Engine is just as fresh at the top of a long hill as at the bottom. This is mainly due to the new design of Cylinder, allowing a perfectly concentric and true Cylinder Barrel, much larger Valves, deeper and more numerous Radiating Fins, and larger Exhaust Port and Pipe. The advantages of a truly concentric Cylinder cannot be over estimated, as when subjected to heat, the expansion is equal, and at once does away with all the evils of overheating, viz.: loss of power, knocking on hills, and "that tired feeling."

The Piston is fitted with two Rings, and has a flat top. Oil grooves are cut its whole length, and holes are drilled in the body to further assist lubrication. The Gudgeon Pin is a sliding fit, and is secured by fitting a copper washer at each side, these preventing any side movement, and a scored Cylinder.

The Connecting Rod is a Steel Forging, and is fitted with Phosper Bronze Bushes, with specially long wearing surfaces.

The Flywheels are mounted on long plain Bearings and are perfectly balanced, giving that smooth running for which the Λ .J.S. Engines have always been noted.

The Valve Gear has been greatly improved, is simpler, has less moving parts, and last but not least is practically noiseless. The Cams are of very large diameter and are solid with the Gear Wheels, which are machined from the solid Steel Bar.

The entire Engine can be removed from the Frame by withdrawing three Bolts and detaching the Exhaust Pipe. On all models the Cylinders can be removed by taking off two nuts, and without disturbing the Engine in the Frame.

THE GEAR BOX. The outstanding features of the A.J.S. Two-Speed Gear Box are its extreme simplicity, and accessability. With the exception of the Hoffman Ball Bearings the Box contains only five parts, which can be removed by the merest novice in a few moments. There is an entire absence of small complicated parts, and the whole fitment is essentially "Fool Proof." The double Dog Drive gives a positive drive on both gears, and on Top Gear the drive is direct.

INTRODUCTION-Continued.

The Box is oiltight, and holds sufficient oil to last quite a 1,000 miles. Owing to the position of the Filler it is impossible to over-lubricate the Box. Oil as used for the Engine is the most suitable. The Gears are operated by means of a small lever on the top tube which has three positions—High, Low and Neutral, In the Neutral position the driving wheel is absolutely free, and enables the machine to be wheeled about with almost the same ease as a Push Bike.

TRANSMISSION.

Two Driving Chains are used, one from the Engine to Gear Box, and one from Gear Box to back wheel. We would emphasize the fact that either chain can be adjusted independently of the other, a very important feature of our system of transmission. The finest Chains in the World (Hans Renold) are used on all models. Any harshness in the drive at slow speeds is absorbed by our special slipping clutch on the Engine Shaft. Other than adjusting to suit the weight of the rider, this fitment requires no attention whatever.

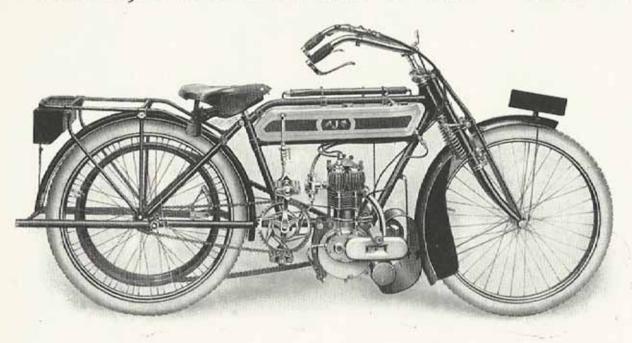
FREE ENGINE CLUTCH. The Free Engine Clutch is fitted to the end of Gear Box Shaft, and is operated by means of a Lever on the Handle Bar (the only correct position). By means of this Clutch, one can sit in the Saddle and start away from a standstill just like a Car. This Clutch is extremely simple in construction, can be entirely dismantled in two minutes, never slips, and requires no lubrication, or attention whatever.

For Solo Riding we earnestly recommend our 2½-h.p. Two-Speed Chain Drive Model B. It is medium in price, medium in weight, and economical in up-keep. On Low Gear it is capable of climbing any hill however steep, and on Top Gear a speed of over 40 miles per hour is easily attained. The machine can be driven at a walking pace, and in the thickest traffic can be negotiated with ease and safety. It is a "go-anywhere" machine, and designed for hard and continual service all the year round.

The 5-h.p. Model D has been built specially for Side-car work, or as a powerful Solo mount. When fitted with a Side-car it has all the advantages of an up-to-date Motor Car. By means of the "Kick-down" starting device, the engine can be started up without leaving the saddle, and with the driving wheel on the ground. The magnificent Twin-cylinder Engine gives a wonderfully smooth and flexible drive, and the way it will romp up hills on Top Gear with a double load is a revelation.

Full Specifications are given with the illustrations, but should any further particulars be desired, we cordially invite our patrons to communicate with us direct, and we shall be only too happy to give every information required.

THE A.J.S. LIGHTWEIGHT 21 H.P. Model A. Belt Drive.



Price - - 37 Guineas complete,

Forks. "Druid" Patent Spring, Girder Pattern.

Wheels. 26" fitted with Hutchinson, 26" x 24" Rubber Studded Tyres.

Brakes. Front, Bowden Patent. Back, operated by Foot Pedal.

Saddle. Brooks' B 130, Size 3, Patent Saddle, or Lycett's.

Tool Bag. Special Design. The bag is enclosed in a Steel Case that protects it in wet weather.

Tools. A full kit of tools is provided in leather roll.

Finish. Black Enamel, four coats on one special coat of Rust Preventative. All usual parts heavily Nickel-Plated, Tank Aluminium, with Black Panels and Lined Green.

Wheelbase. 4' 3" Weight. 132 lbs. Crankcase Clearance. 6" Number Plates. Fitted ready for numbering.

We reserve the right to deviate from the above specification without notice.

SPECIFICATION.

Engine. Single Cylinder, 2½ H.P., 70 × 82 M/M., Bore and Stroke. Interchangeable Mechanically operated Inlet and Exhaust Valves, Improved Adjustable Pulley.

Carburetter. "Amac" Multiple Jet.

Ignition. "U.H." high tension Magneto, Chain driven, and protected by a wide metal shield.

Tank. Strongly made with one Longitudinal Seam, Enclosed Oil Pump (Rotherham) Petrol Injector, Filter and Gauge.

Belt Best quality Rubber 3" V Section.

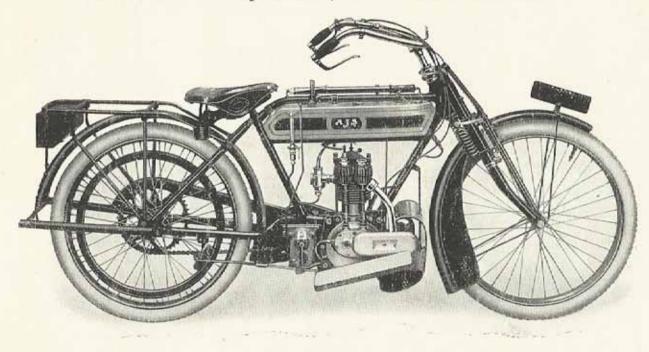
Stand. "Kick-up" type, fitted to Fork Ends. The Back Wheel can be removed without removing the Stand.

Carrier. Improved design. Is tubular, exceedingly strong, and is detachable from Frame.

Frame. : Improved drop pattern, giving extremely low saddle position (30" from ground).

THE A.J.S. LIGHTWEIGHT, 21 H.P. Model B.

Fitted with Two-Speed Gear, Clutch and Chain Drive.



Price - - 44 Guineas complete.

Wheels. 26" fitted with Hutchinson 26" \times $2\frac{1}{4}$ " Rubber Studded Tyres.

Saddle. Brooks' B 130, Size 3, Patent Saddle, or Lycett's.

Tool Bag. Special Design. The bag is enclosed in a Steel Case that protects it in wet weather.

Brakes. Front, Bowden Patent. Back, operated by Foot Pedal.

Gears in Mesh. Positive Drive. All Gears can be removed in a few minutes without disturbing the Box on the Frame. All Gears in Mesh. Positive Drive. Direct Drive on Top Gear. "Kick-down" Starting can be fitted at £2 0s. 0d. extra.

Tools. A full kit of tools is provided in leather roll.

Finish. Black Enamel, four coats on one special coat of Rust Preventative. All usual parts heavily Nickel-Plated, Tank Aluminium, with Black Panels and Lined Green.

Wheelbase. 4' 3" Weight. 140 lbs. Crank-case Clearance. 6" Number Plates. Fitted ready for numbering.

We reserve the right to deviate from the above specification without notice.

SPECIFICATION.

Engine. Single Cylinder, 2½ H.P., 70 × 82 M/M., Bore and Stroke. Interchangeable Mechanically operated Inlet and Exhaust Valves.

Carburetter. "Amac" Multiple Jet.

Ignition. "U.H." high tension Magneto Chain driven, and protected by a wide metal shield.

Tank. Strongly made with one Longitudinal Seam, Enclosed Oil Pump (Rotherham) Petrol Injector, Filter and Gauge.

Chains. "Hans Renold" Special Heavy Motor Cycle Chain

Stand. "Kick-up" type, fitted to Fork Ends. The Back Wheel can be removed without removing the stand.

Carrier. Improved design. Is tubular, exceedingly strong, and is detachable from Frame.

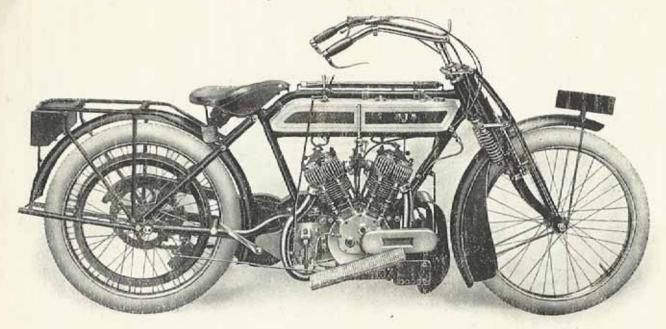
Frame. Special Design to take the A.J.S. Countershaft Two-Speed Gear, Dropped at back to give low Saddle position. Saddle 30" from ground.

Forks. "Druid" Patent Spring Girder Pattern.

THE A.J.S. 5 H.P. PASSENGER MACHINE.

Model D.

Fitted with Two Speed Gear, Clutch and Chain Drive.



Price - - 60 Guineas complete.

Forks. "Druid" Patent Spring, Girder Pattern.

Wheels. Fitted with Hutchinson 26" × 21" Rubber Studded Tyres, Heavy Passenger Type on Back and Tourist Trophy on Front.

Saddle. Brooks' Patent B 104, plain top, or Lycett's padded top.

Brakes. Front, "Bowden" Patent. Back, operated by Foot Pedal.

Tool Bag. Special Design. The bag is enclosed in a Steel Case that protects it in wet weather.

Tools. A full kit of tools is provided in leather roll.

Gear Box. Special design for Passenger work.

Starting. Special design "Kick-down" Starting Device is fitted, enabling the Engine to be started without leaving the saddle.

Finish. Black Enamel, four coats on one special coat of Rust Preventative. All usual parts heavily Nickel-Plated, Tank Aluminium, with Black Panels, and Lined Green.

Wheelbase. 4' 6" Weight. 208 lbs. Crank-case Clearance. 5\frac{1}{2}" Number Plates. Fitted ready for numbering.

We reserve the right to deviate from the above specification without notice.

SPECIFICATION.

Engine. Twin Cylinder, 70 × 82 Bore and Stroke. Cylinder set at 50°. All Valvesmechanically operated and interchangeable.

Carburetter. "Amac" Multiple Jet.

Ignition. "U.H." high tension Magneto, Chain driven, and protected by a wide metal shield.

Tank. Strongly made with one Longitudinal Scam, Enclosed Oil Pump (Rotherham) Petrol Injector, Filter and Gauge.

Chains. "Hans Renold" Special Heavy Motor Cycle Chain.

Stand. "Kick-up" type, fitted to Fork Ends. The Back Wheel can be removed without removing the Stand.

Carrier. Improved design. Is tubular, exceedingly strong, and is detachable from Frame.

Frame. Built specially strong to withstand the strains of Side-car work.

TERMS OF BUSINESS.

PAYMENT. One-third Cash with order and balance against invoice when machine is ready for delivery.

CARRIAGE. Free on Rail Wolverhampton.

PACKING. Crate, 3/6 and not returnable.

RAILWAY TRANSIT. All goods are sent per Good's Train except otherwise ordered, and are signed for by the Railway Companies as being in good condition. All Machines should, on arrival, be carefully examined, and if damaged, signed for as such, and an immediate claim made on the Carriers.

GUARANTEE.

We give the following guarantee with our motor cycles instead of the guarantee implied by statute, or otherwise, as to the quality or fitness of such machines for the purpose of motor cycling; any such implied guarantee being in all cases excluded. In the case of machines which have been used for "hiring out" purposes, or in respect of which our Trade Mark or manufacturing number has been removed, no guarantee of any kind is given, or is to be implied.

WE GUARANTEE, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship; but this guarantee is to extend and be in force for six months only from the date of purchase, and the damages for which we make ourselves responsible under this guarantee are limited to the replacement of any part which may have proved defective.

WE UNDERTAKE, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As motor cycles are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear-and-tear, misuse, or neglect.

Any motor cycle sent to us to be plated, enamelled, or repaired, will be repaired upon the same conditions as if it were a new motor cycle, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of material and workmanship, such guarantee to extend and be in force for six months only from the time such work shall have been executed, and this guarantee is in lieu and in exclusion of any common law or statute warranty, and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

CONDITIONS OF GUARANTEE.

If a defective part should be found in our motor cycles, it must be sent to us, carriage paid, and accompanied by an intimation from the sender that he desires to have it repaired free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the name of the agent from whom he purchased, and the date of the purchase.

Failing compliance with the above, no notice will be taken of anything which may arrive, but such articles will lie here at the risk of the senders; and this guarantee, or any implied guarantee, shall not be enforceable.

We guarantee only those machines which are bought either direct from us or from one of our duly authorised agents, and under no other conditions.

We do not guarantee the specialities of other firms such as: tyres, saddles, chains, belts, etc., or of any component part supplied to the order of the purchaser differing from our standard specification, supplied with our motor cycles or otherwise.

THE TERM "AGENT"

is used in a complimentary sense only, and those firms whom we style our agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account, other than the sale of goods which they may purchase from us; nor are they authorised to give any warranty or make any representation on our behalf other than those contained in the above guarantee.

When ordering spare parts or replacements do not fail to advise whether 1911 or 1912 Model to avoid mistakes,

IMPORTANT NOTICE.—We do not supply Engines or Gear Boxes to other Manufacturers. They are only genuine when fitted to the A. J. S. Motor Cycles.

Some of our Successes during last Season.

- A.C.U. Quarterly Trial, July 23rd, 1910. Highest Award, 1st Class Certificate.
- M.C.C. 12 hours Reliability Trial, August 1st, 1910. Two Silver Medals.
- A.C.U. Quarterly Trial, October 12th, 1910. Highest Award, two 1st Class Certificates (The only team of Lightweights to finish).
- M.C.C. 24 hours Mid-Winter Reliability Trial, December 27th and 28th, 1910. Highest Awards, Three Gold Medials (In extremely bad weather and 13 hours of darkness).
- A.C.U. Quarterly Trial, January 28th, 1911. Highest Award, 1st Class Certificate. (First in Hill Climbing on Theory and Westerham Hill).
- Irish Reliability Trial, January 28th, 1911. Full Marks 60.
- M.C.C. London to Land's End and back Reliability Trial, April 14th to 17th, 1911. Silver Medal.
- A.C.U. April Quarterly Trial. First and Second on Sutton Bank and Lythe Bank Test Hills, and awarded Two 1st Olass Cortificates.

 (Only four other machines out of 42 competitors gained First Class Certificates).
- Leicester and District Motor Cycling Club Hill Climb, at Ling's Hill, May 18th, 1911. First on time and formula. First Prize.
- M.C.C. London to Edinburgh Reliability Trial, June 2nd and 3rd, 1911. Two entered and Two gained Highest Award, two Gold Medals.
- Birmingham Motor Cycling Club Reliability Trial, Birmingham to Land's End and back, June and alle Will Two entered, Two gained Highest Award, two Gold Medals.
- A.C.U. Tourist Trophy Race in the Isle of Man, June 30th, 1911. Two machines entered and Two limited Fifth and Blath in Single Cylinder Class. Mr. J. D. Corke (an amateur rider) was the Third private owner to limit
- A.C.U. (Midland Centre) Hill Climb, at Harley Bank, Wenlock. Gained First Place in Light weight Clim (Midden by an Amateur)
 Awarded Gold Medal.
- A.C.U. (Midland Centre) Speed Trials, Sutton Park. Gained Second Place in Unlimited Class, and Third Flags in Light-weight Class. Awarded Silver Medal.
- A.C.U. Quarterly Trial, July 22nd. 1911. Two machines enter. Two make Non-Stop runn. Again placed First and Humand on the Test Hills, and again Awarded two 1st Class Certificates.
- Manchester Motor Cycle Clubs 120 Miles Reliability Trials, August 5th, 1911, made Non-him Hum in Internal of Miles Winner to be decided by a Hill Climb (below).

LIST OF SUCCESSES.—continued.

- Manchester Motor Cycle Clubs Hill Climb in connection with the above Trial the "A.J.S." succeeded in winning the First Prize and the Silver Cup awarded by Messrs. The Triumph Cycle Co. Ltd.
- Newcastle and District Motor Cycling Club 400 Miles Reliability Trial, August 6th and 7th, 1911. Lost not a single mark and awarded "N.S.U." Cup. The lirst time for 7 years the Cup has been won without losing a single mark.
- A.C.U. Six days 1,000 Miles Reliability Trial, August 14th to the 19th, 19th. Two machines entered, two climb all the Hills on the Course and awarded Two Silver Medals.
- Leicester and District Motor Cycle Club Hill Climb, September 28th. First on Time and Formula.
- Liverpool Auto Cycle Club Reliability Trial, October 7th and 8th. 1911. Made Non-Stop Run and climbed all the Hills on the course. Awarded The Club Gold Medal and The Fifty Guinea Challenge Cup. (Out of 41 Competitors the A.J.S. was the only machine to make a Non-Stop Run and Climb all the Hills on the course).
- A.C.U. Quarterly Trial (Midland Centre) October 14th, 1911, Two machines entered, Two made Non-Stop Runs and again awarded Two First Class Certificates. Extract from "Motor Cycling."—"The A.J.S. Machines, as usual, came through with clean sheets, thus bringing to a close a remarkable run of successes for the present year."
- Bristol Bicycle and Motor Club Reliability Trial and Speed Judging Competition. The A.J.S. First.
- Sutton Coldfield A.C. Two Days Reliability Trial, December 16th and 17th Bronze Medal.
- M.C.C. Winter Run, London to Exeter and back, December 26th and 27th. 5 H.P. and Side Car. Gold Medal.
- North West London M.C.C. Open Trial, London-Gloucester, December 30th. Silver Cup.
- Herts County A.C. Quarterly Reliability Trial, January 20th. Non-Stop.
- The Surrey & Streatham Motor Cycle Clubs 150 Miles Reliability Trial, February 3rd, 1912. Non-Stop. Silver Medal.
- Sutton Coldfield A.C. & Club Open Reliability Trial, February 17th, 1912. 5 H.P. Machine and Side Car, driven by an Amateur, made Non-Stop Run. Awarded Silver Medal; also 2\frac{1}{2} H.P. Machine made Non-Stop Run and awarded Silver Medal.

The reputation of the A.J.S. has long been established; the above successes merely confirm it.

WE HAVE NO FAILURES.

For Speed, Hill-Climbing, and Absolute Reliability, the A.J.S. stands Pre-eminent.

Hildreth & Chambers, Ltd., Victoria Street, Wolverhampton.