

# ARIEL





# ARIEL

## DESIGNED FOR YOU

*SO THAT YOU MAY EXPERIENCE TO THE  
FULL THE JOYS OF MOTORCYCLING*



It will take you there, anywhere, any distance, and bring you back again without a falter. Impart that care-free feeling so essential to perfect motor cycling pleasure and make you glad you chose an ARIEL. Already ARIEL is the most popular—the most coveted motor cycle in the World. Such widespread approval—such enthusiasm is not lightly won, sheer merit alone could accomplish this—perfection of design—mighty performance—staunch and faithful service. ARIEL Supremacy is built on experience which began in the very earliest days of motor cycling. Back in the 'nineties ARIEL was building motor cycles, and pride of craftsmanship in the years that followed put

ARIEL on the pinnacle of fame. The constant striving, year after year, of the greatest experts, the skill of the highly specialised personnel of this great motor cycle factory, with its vast resources, have produced for you this wonder of craftsmanship, the 1932 ARIEL. Full of New Features—more advanced than ever, a wonderful range for 1932. A Model for every purpose—the tourist will find a powerful mount ready to cover the longest and stiffest journey without a falter—the man of speed will find in ARIEL the fulfilment of his desire for the joy of absolute Speed attained by breathless acceleration. You'll be a proud and happy man astride an ARIEL!



# GENERAL SPECIFICATION

## 1932

| MODEL            | LB.32<br>250 c.c. S.V.   | LF.32<br>250 c.c. O.H.V. | MB.32<br>350 c.c. S.V. | M.F.32<br>350 c.c. O.H.V. | M.L.F.32<br>350 c.c. O.H.V. | VB.32<br>550 c.c. S.V.                             | VG.32<br>500 c.c. O.H.V. | SB.32<br>550 c.c. S.V.   | SG.32<br>500 c.c. O.H.V. | 4 P.S.32<br>4 F.G.32<br>500 c.c. & 600 c.c. |
|------------------|--|--------------------------|------------------------|---------------------------|-----------------------------|--|--------------------------|--|--------------------------|---|
| CARBURETTER      | Amal, flange fitting (except L. Models), with throttle stop giving "tick over" setting adjustable independently of cable adjustment. Twist grip control on all Models. |                          |                        |                           |                             |  |                          |  |                          |   |
| MAGNETO          | Lucas Magneto fitted as Standard to all Models   |                          |                        |                           |                             |  |                          |  |                          |   |
| GEARBOX          | Burman 3-speed   |                          |                        |                           |                             |  | Burman 4-speed           |  |                          |   |
| FRAME            | Multiple Triangulated  |                          |                        |                           |                             | Cradle Type  |                          | Duplex Cradle Type   |                          |   |
| FRONT FORK       | Tension Spring   |                          |                        |                           |                             | Compression Spring                                 |                          |  |                          |   |
| TRANSMISSION     | Totally enclosed aluminium oil bath case for primary chain   |                          |                        |                           |                             | Steel chain case with automatic chain lubrication. |                          | Totally enclosed aluminium oil bath for primary chain.             |                          |   |
| BRAKES           | 5½ in. diameter (Home). 6½ in. diameter (Export).  |                          |                        |                           | 6½ in. diam.                |  | 7 in. diameter           |  |                          |   |
| TYRES            | 25 x 3 Dunlops (Home). 25 x 3.25 Dunlops (Export).   |                          |                        |                           | 25 x 3.25 Dunlops.          |  | 26 x 3.25 Dunlops        |  |                          |   |
| STAND            | Front and "spring-up" Rear Stands fitted to all Models   |                          |                        |                           |                             |  |                          |  |                          |   |
| HANDLEBAR        | "Clean" type—adjustable over a wide range on all Models. Standard type bar with "clip-on" controls can be fitted as a free option                                      |                          |                        |                           |                             |  |                          |  |                          |   |
| STEERING DAMPER  | 7/6 extra (Home). (Not 30/- Tax)   |                          |                        |                           |                             | Fitted as Standard                                 |                          |  |                          |   |
| PETROL TANK      | 2 gallons  |                          |                        |                           |                             | 2½ gallons   |                          | 3½ gallons   |                          |   |
| SADDLE           | Lycett's Aero Elastic Saddle fitted to all Models. 3-point suspension, adjustable for height   |                          |                        |                           |                             |  |                          |  |                          |   |
| EQUIPMENT        | Large welded all-steel tool boxes. Complete tool kit. Grease gun and tyre inflator   |                          |                        |                           |                             |  |                          |  |                          |   |
| SPEEDOMETER      | Smith's Trip Type £2 5 0 extra   |                          |                        |                           |                             |  |                          | Fitted as Standard   |                          |   |
| INSTRUMENT PANEL | Not fitted   |                          |                        |                           |                             |  |                          | Fitted as Standard   |                          |   |
| LIGHTING SET     | ML. Maglita £5 5 0 extra. Lucas Magdyno £5 10 0 extra.   |                          |                        |                           | Lucas Magdyno £5 10 0 extra |  |                          | Lucas Magdyno £5 15 0 extra, including panel and inspection light. |                          |   |
| FINISH           | Best Black Enamel. Petrol tank and all usual Bright Parts Chromium Plated  |                          |                        |                           |                             |  |                          |  |                          |   |
| TAX              | 30/- if fitted with Maglita  |                          |                        |                           |                             | £3 0 0   |                          |  |                          |   |
| PRICE            | £35 15 0   | £38 15 0                 | £36 15 0               | £38 15 0                  | £39 15 0                    | £45 15 0   | £48 15 0                 | £52 15 0   | £55 15 0                 | £65 15 0                                    |

The above Specifications are subject to alteration without notice.





### 350 c.c. Side Valve Inclined Engine

Model MB. 32

£36 : 15 : 0 ML. Maglita £5 : 5 : 0 ex.  
(30/- Tax)

### 250 c.c. Side Valve Inclined Engine

Model LB. 32

£35 : 15 : 0 ML. Maglita £5 : 5 : 0 ex.  
(30/- Tax)

The Model LB. 32 is similar to the Model MB. 32, with the exception of the engine, particulars of which are as follows :  
Bore 65 mm. Stroke 75 mm. Capacity 248 c.c. Cylinder head integral with the barrel.

For further particulars see engine of Model MB. 32.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS.

### 350 c.c. S.V. Model MB. 32 (as illustrated)

#### ENGINE

Bore 72 mm. Stroke 85 mm. Capacity 348 c.c. Detachable cylinder head (high power) of new design. Totally enclosed valve gear, automatically lubricated. Double roller bearing big end. Ball bearing on both sides of main shaft. Aluminium alloy piston. Engine shaft shock absorber. The design of the Power Unit gives an extremely lively performance.

#### LUBRICATION

The lubrication system, employing two plunger pumps, is of the dry sump type. Patent centrifugal oil purifier embodied in flywheel. Separate oil tank mounted on platform under the saddle, with car type oil pressure gauge mounted flush in the centre of the petrol tank.

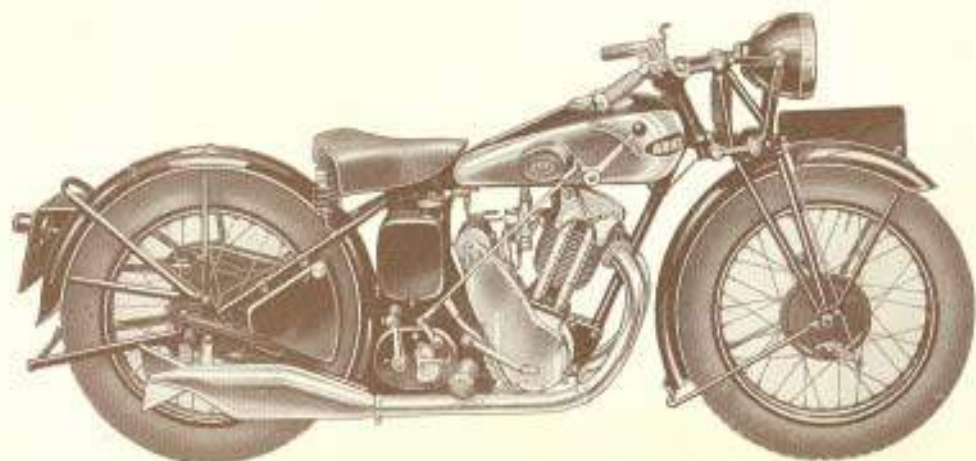
#### GEAR RATIOS

| Engine Sprocket      | 1st  | 2nd  | 3rd |
|----------------------|------|------|-----|
| 18 teeth (Model MB.) | 15.1 | 9.3  | 5.7 |
| 16 teeth (Model LB.) | 17.0 | 10.5 | 6.5 |

GENERAL SPECIFICATION ON PAGE ONE







### 350 c.c. O.H.V. 2 port Inclined Engine

Model M.2F. 32

£39 : 15 : 0 Lucas Magdyno £5 : 10 : 0 ex.

### 350 c.c. O.H.V. 1 port Inclined Engine

Model M.1F. 32

£38:15:0 ML Maglita £5 : 5 : 0 ex. 30/- Tax

The Model M.1F. 32 is similar in specification to the Model M.2F. 32, but has a single-port head, 2.5 x 3 Dunlop Tyres, 5½ in. diameter brakes, and is not fitted with a steering damper.

### 250 c.c. O.H.V. 2 port Inclined Engine

Model LF. 32

£38:15:0 ML Maglita £5 : 5 : 0 ex. 30/- Tax

The Model LF. 32 is similar in specification to the Model M.1F. 32, with the exception of the engine, particulars of which are as follows: Bore 65 mm. Stroke 75 mm. Capacity 248 c.c. For further particulars see engine of M.2F. 32.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS

#### 350 c.c. O.H.V. Model M.2F 32 (as illustrated)

##### ENGINE

Bore 72 mm. Stroke 85 mm. Capacity 348 c.c. Double-port detachable cylinder head. Inlet valve guide lubricated by suction from crankcase. Double valve springs. Totally enclosed rocker gear and push rods. Double roller bearing big end. Ball bearings on both sides of main shaft. Aluminium alloy piston. Engine shaft shock absorber.

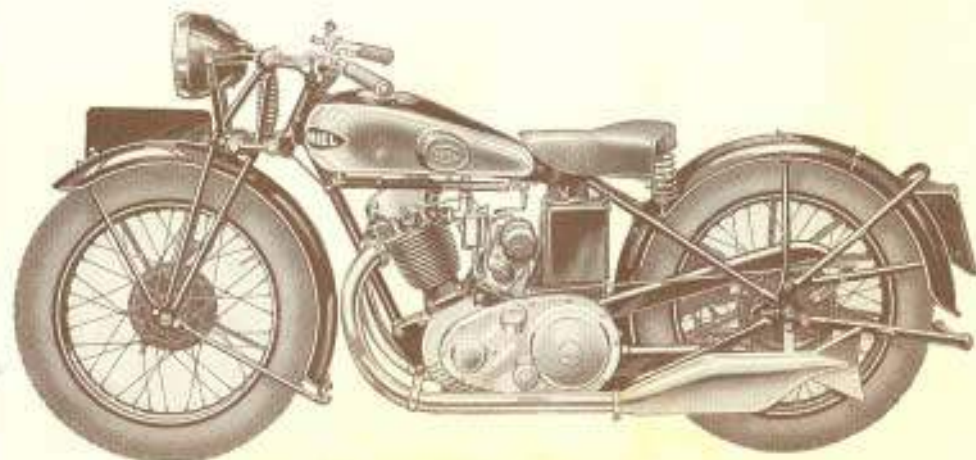
##### LUBRICATION

The lubrication system employing two plunger pumps is of the dry sump type. Patent centrifugal oil purifier. Separate oil tank mounted on platform under the saddle. A car type oil pressure gauge is mounted flush in the centre of the petrol tank.

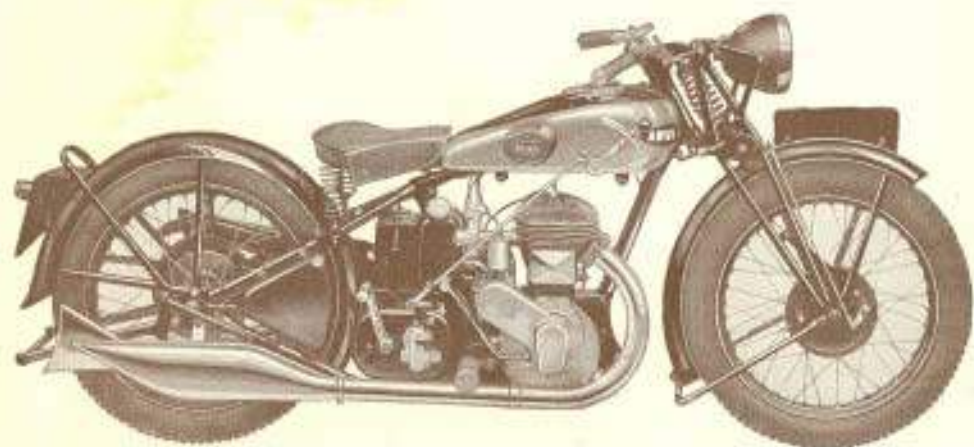
##### GEAR RATIOS

| Engine Sprocket     | 1st  | 2nd  | 3rd |
|---------------------|------|------|-----|
| 19 teeth (Model MF) | 14.4 | 8.8  | 5.4 |
| 17 teeth (Model LF) | 16.0 | 10.0 | 6.0 |

GENERAL SPECIFICATION ON PAGE ONE







550 c.c.

## SIDE VALVE VERTICAL ENGINE

Model VB. 32

£45 : 15 : 0

Lucas Magdyno £5 : 10 : 0 extra

This machine is highly recommended for prolonged and arduous work as a solo machine or with a sidecar. It can be depended upon to give unfaltering service over a long period with a minimum of attention or adjustment.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS

## ENGINE

Bore 86.4 mm. Stroke 95 mm. Capacity 557 c.c. Detachable cylinder head (high power) of new design. Totally enclosed valve gear, automatically lubricated. Double roller bearing big end. Ball bearing on both sides of main shaft. Aluminium alloy piston. Ground timing gears. Engine shaft shock absorber. The design of the Power Unit gives an extremely lively performance.

## LUBRICATION

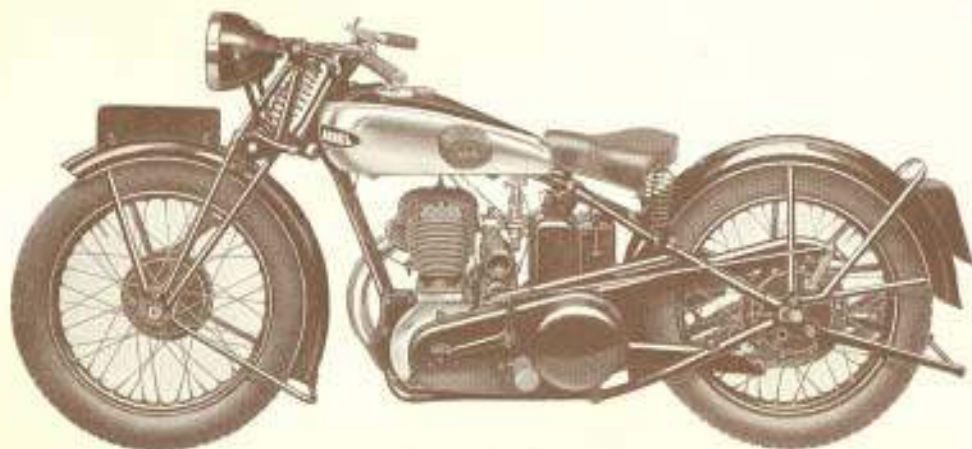
The lubrication system employing two plunger pumps is of the dry sump type. Patent centrifugal oil purifier embodied in the flywheel. Separate oil tank mounted on platform under saddle with car-type oil pressure gauge mounted flush in the petrol tank.

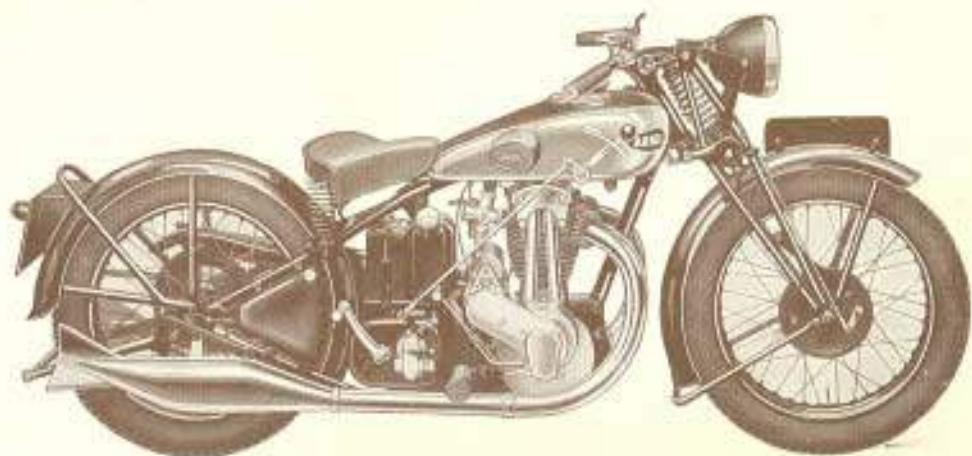
## GEAR RATIOS

| Engine Sprocket             | 1st  | 2nd | 3rd |
|-----------------------------|------|-----|-----|
| 23 teeth (Standard Solo)    | 13.8 | 7.7 | 4.8 |
| 21 teeth (Low Solo)         | 15.1 | 8.5 | 5.2 |
| 19 teeth (Standard Sidecar) | 16.8 | 9.4 | 5.8 |

Close ratio gearbox obtainable at an extra charge of 10/-

GENERAL SPECIFICATION ON PAGE ONE





**500 c.c. O.H.V.  
4-VALVE VERTICAL ENGINE**

Model VG. 32

**£48 : 15 : 0**

Lucas Magdyno £5 : 10 : 0 extra

This model is recommended to the sporting rider as a very lively machine with a performance which is out of proportion when judged by previous standards, to the low price.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS

**ENGINE**

Bore 86.4 mm. Stroke 85 mm. Capacity 499 c.c. **FOUR-VALVE TWO-PORT DETACHABLE CYLINDER HEAD.** Inlet valve guides lubricated by suction from crankcase. Double valve springs. Totally enclosed valve gear with rockers mounted on roller bearings. Double roller bearing big end. Ball bearings on both sides of main shaft. Aluminium alloy pistons. Engine shaft shock absorber. Ground timing gears. The design and materials used in this engine will permit racing speeds to be obtained by special tuning, the standard machine attaining not less than 80 m.p.h.

**LUBRICATION**

The lubrication system employing two plunger pumps is of the dry sump type. Patent centrifugal oil purifier embodied in the flywheel. Separate oil tank mounted on platform under saddle with car-type oil pressure gauge mounted flush in the petrol tank.

**GEAR RATIOS**

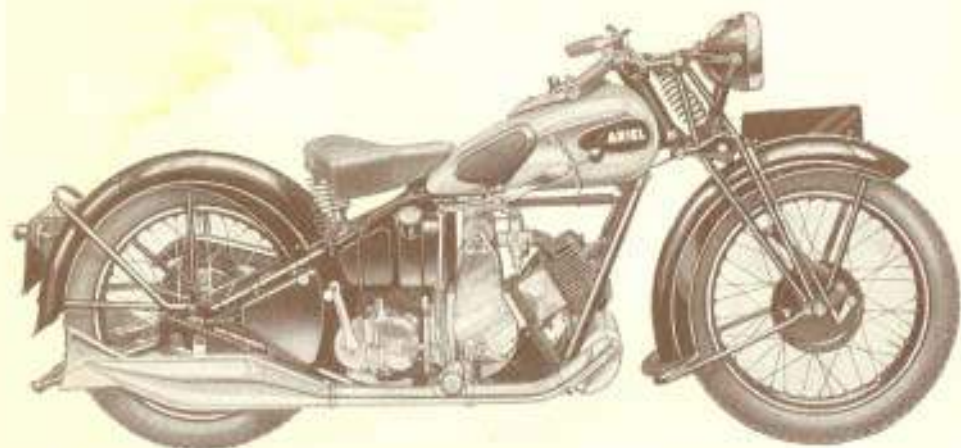
|                             | 1st  | 2nd | 3rd |
|-----------------------------|------|-----|-----|
| Engine Sprocket             | 13-8 | 7-7 | 4-8 |
| 21 teeth (Low Solo)         | 15-1 | 8-5 | 5-2 |
| 19 teeth (Standard Sidecar) | 16-8 | 9-4 | 5-8 |

Close ratio gearbox obtainable as an extra charge of 10%.

**GENERAL SPECIFICATION ON PAGE ONE**







550 c.c.

**SIDE VALVE SLOPING ENGINE**

Model 5B. 32

**£52 : 15 : 0**

Including Instrument Panel and Speedometer

Lucas Magdyno £5 : 15 : 0 extra

This machine is recommended as a de Luxe touring model, particularly for use with a sidecar, and its specification embraces every practical refinement known to the discerning motor cyclist.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS

**ENGINE**

Bore 86.4 mm. Stroke 95 mm. Capacity 557 c.c. Detachable cylinder head. Double roller bearing big end. Ball bearings on both sides of main shaft. Aluminium alloy piston. Ground timing gears, gear driven magneto, and decompressor. Engine shaft shock absorber. Fitted with Triple Silencer.

**LUBRICATION**

The lubrication system employing twin gear pumps is of the dry sump type. Patent centrifugal oil purifier embodied in the flywheel. Separate oil tank mounted on platform under saddle with car-type oil pressure gauge mounted flush in the instrument panel.

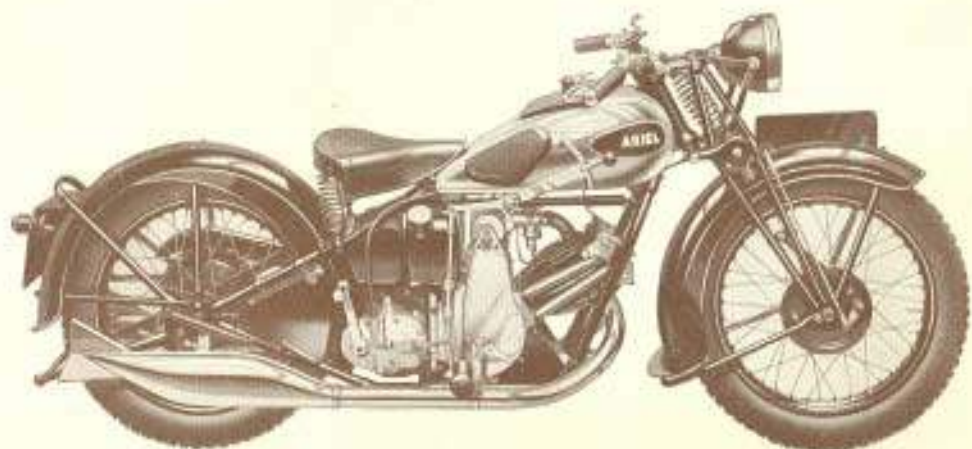
**GEAR RATIOS**

| Engine Sprocket             | 1st  | 2nd | 3rd | 4th |
|-----------------------------|------|-----|-----|-----|
| 23 teeth (Standard Solo)    | 12.6 | 7.9 | 5.9 | 4.7 |
| 21 teeth (Low Solo)         | 13.8 | 8.6 | 6.5 | 5.2 |
| 19 teeth (Standard Sidecar) | 15.3 | 9.5 | 7.2 | 5.7 |

GENERAL SPECIFICATION ON PAGE ONE







**500 c.c. O.H.V.  
4-VALVE SLOPING ENGINE**

Model 5G. 32

**£55 : 15 : 0**

Including Instrument Panel and Speedometer

Lucas Magdyno £5 : 15 : 0 extra

A de Luxe machine with an engine having the performance which will give everything demanded by the sporting rider, together with the very full equipment more usually associated with the luxury touring machine.

ASK YOUR DEALER FOR HIRE PURCHASE TERMS

**ENGINE**

Bore 86.4 mm. Stroke 85 mm. Capacity 499 c.c. Specially tuned for high speed touring. **FOUR-VALVE TWO-PORT DETACHABLE CYLINDER HEAD.** Inlet valve guides lubricated by suction from crankcase. Double valve springs. Highly polished valve ports. Totally enclosed roller bearing rockers and push rods. Double roller bearing big end. Ball bearings on both sides of main shaft. Aluminium alloy piston. Ground timing gears and gear driven magneto. Engine shaft shock absorber and decompressor.

**LUBRICATION**

The lubrication system employing twin gear pumps is of the dry sump type. Patent centrifugal oil purifier embodied in the flywheel. Separate oil tank mounted on platform under saddle with car-type oil pressure gauge mounted flush in the instrument panel.

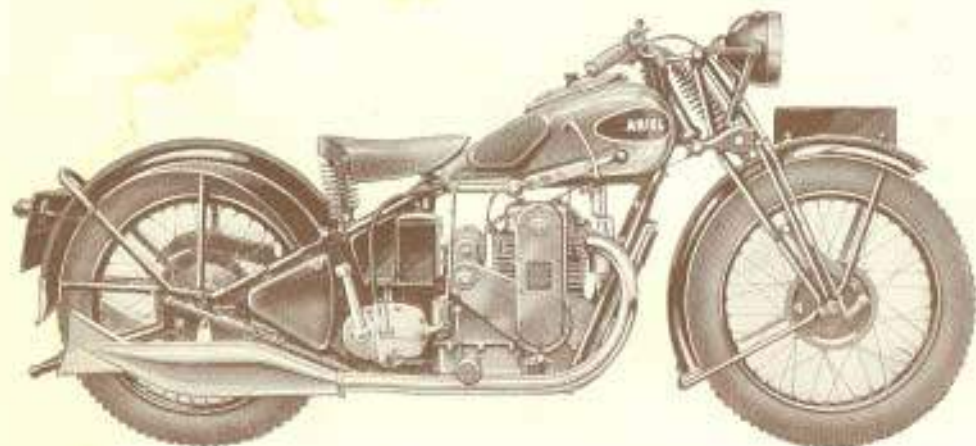
**GEAR RATIOS**

|                             |      |     |     |     |
|-----------------------------|------|-----|-----|-----|
| Engine Sprocket             | 1st  | 2nd | 3rd | 4th |
| 21 teeth (Standard Solo)    | 13.8 | 8.6 | 6.5 | 5.1 |
| 19 teeth (Standard Sidecar) | 15.3 | 9.5 | 7.2 | 5.7 |

GENERAL SPECIFICATION ON PAGE ONE







500 c.c. and 600 c.c.  
**FOUR CYLINDER**  
**THE SQUARE FOUR**

Models 4F/5. 32 and 4F/6. 32

**£65 : 15 : 0**

Including Instrument Panel and Speedometer

Lucas Magdyno £5 : 15 : 0 extra

The Model 4F/6 has a performance (especially with sidecar) greatly superior to the Model 4F/5, which is retained to meet the requirements of those who desire to enter competitions in the 500 c.c. class.

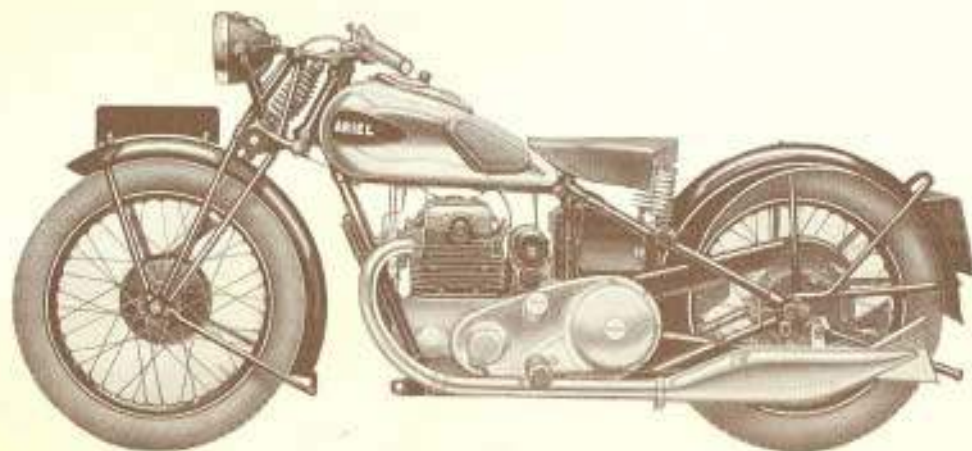
ASK YOUR DEALER FOR HIRE PURCHASE TERMS

The introduction of the Square Four during the 1931 Season marked a new epoch in the history of motor cycling. The Sales response to this model has been magnificent and the machine has proved itself to be true to Ariel tradition in the hands of a discriminating public, and has called forth the highest praise from those experts who are attached in varying capacities to the Motor Cycle Press. The design of this wonderful machine STANDS UNALTERED for 1932, the only modifications being some detail alterations giving better accessibility and prevention of any possibility of oil leaks, and the introduction of a new 600 c.c. engine, the design of which is identical with the 500 c.c. model. The 600 c.c. is specially recommended for use with a sidecar.

**PATENTS**

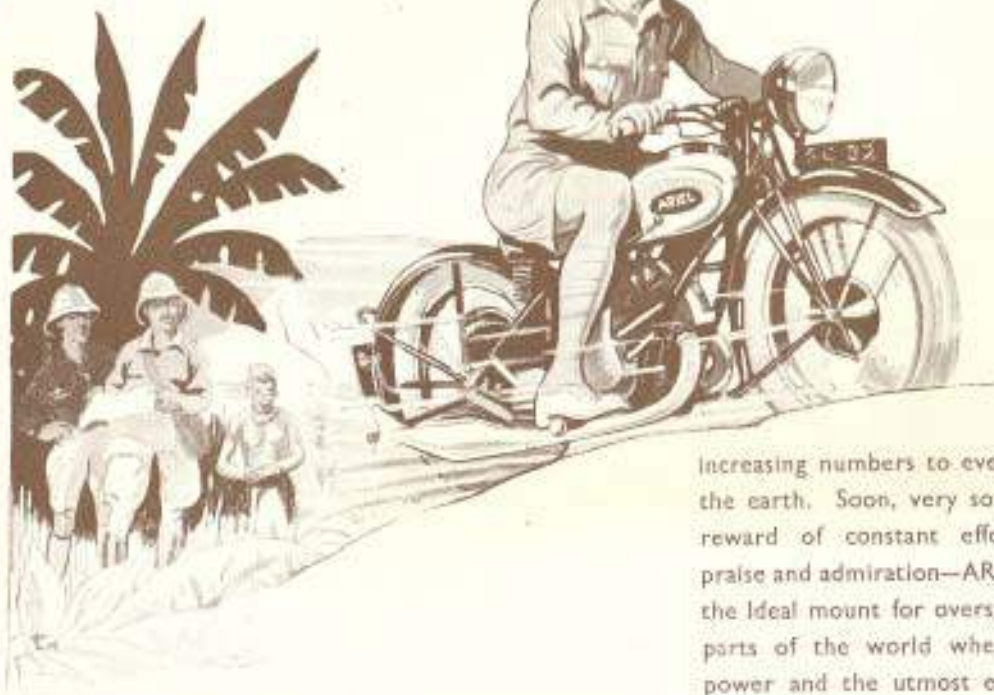
The Ariel Square Four is made under British Patents Nos. 330231 and 330291, and pending Patents Nos. 29405/29, 4140/30, 7332/30, 18956/30 and 18957/30. Corresponding Patents pending in Canada, United States, Germany, France, Belgium, Switzerland, Sweden, Italy and Czechoslovakia.

SPECIFICATION ON PAGE NINE





# FOR THE GREATEST TASK

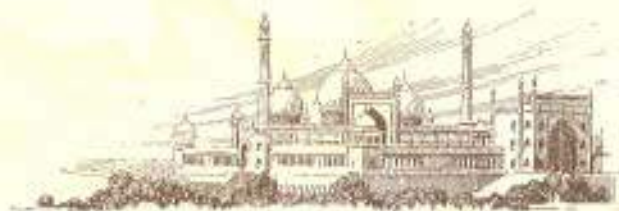


THERE IS  
**ARIEL**  
THE POWER THAT CONQUERS.

**M**ASTER of Overseas conditions—designed and built by men of skill and vision with this ideal in view, ARIEL has proved itself by mighty performance in every part of the World. Year by year, to satisfy the insistent call from Overseas for a motor cycle mighty in power—staunch in service—equal and more than equal to the varying and sometimes appalling conditions which riders have to contend with, ARIEL has gone forth in ever-

increasing numbers to every corner of the earth. Soon, very soon, came the reward of constant effort—universal praise and admiration—ARIEL acclaimed the Ideal mount for overseas. In those parts of the world where enormous power and the utmost endurance are called for—in the great stretches of open country where the motor cycle must not fail—this is where ARIEL proves its metal. Extremes of climate—rough tracks—jungle paths—desert and mountain, all are conquered as part of the day's work. Enthusiasm grows greater and greater as the most difficult obstacles are overcome, as its flying speed—its amazing power—flexibility—and its staunchness are experienced. The greater the task that confronts you

the more reason why you should ride an ARIEL—its enormous engine power—great frame strength—ample ground clearance—and large tyres guarantee absolute satisfaction. You'll be a proud and happy man when you ride an ARIEL—press the starter—feel the throb of power spring into life—let in the clutch and thrill to its eager get away—open the throttle and revel in its rapid acceleration and speed—set her at the stiffest climb and exult in sheer conquest. This ARIEL—this wonder of craftsmanship should be yours!





# POWER AND ENDURANCE



*Lieut. I. S. Kralichek-Soboleff arrives at Calcutta at the completion of 43,000 miles*



*Geof. Munro received at the Town Hall, Sydney, amidst a host of cheering ARIEL enthusiasts after his wonderful Endurance Test*

**M**ANY are the great feats of endurance achieved by ARIEL under the most appalling conditions, giving repeated illustrations of the wonderful reliability which has made this the most coveted motor cycle. Only recently Lieut. I. S. Kralichek-Soboleff at Calcutta completed a victorious journey on a standard ARIEL motor cycle after crossing 20 countries and travelling a distance of 43,000 miles. He started his World tour from India and travelled southwards via Persia, Egypt, through Europe and England, went to the States, and toured the whole of South and North America, including Canada. During this long journey he crossed thousands of miles of desert and rough virgin country, and overcame many other obstacles and dangers in his path. His faith in the ARIEL motor cycle was amply justified, and many were the occasions when his life depended upon the perfect reliability of his machine. Australia is a vast Continent and never before had a single-cylinder motor cycle succeeded in making a complete circuit—10,000 miles. Then came Geof. Munro on his ARIEL to add this conquest to ARIEL'S great record. Thousands of miles of rough virgin country—of trackless desert and bush—had to be crossed. Imagine the terrible strain on the machine—the endurance of the engine, running many hundreds of miles in first and second gears in Tropical heat—and you have an illustration of the mighty power and great endurance of the ARIEL motor cycle. These are just outstanding extracts from ARIEL'S record of great achievements, which are added to week by week from all parts of the World. Thus by its performance—by right of Conquest, ARIEL is predominant.



# ARIEL PERFORMANCE BREEDS ENTHUSIASM



**E**NTHUSIASM for ARIEL performance adds considerably to our postbag—not alone in the English tongue, but in diverse languages from every part of the World where motor cycles are ridden. Take the following extract from a letter received from New Zealand: "I am the first owner of this wonderful machine in the North Island of New Zealand, and I am the happiest man in this country. It is the most outstanding motor that has ever been under me." Could words describe a more intense enthusiasm? Here is a tribute from Canada: "I am the proud possessor of an MF.31 Model ARIEL . . . your machines are fast becoming the most popular in this city . . . I feel sure that Ariels would

swamp this country. The fellows with the American machines admit that English machines are the best . . . wishing the Ariel every success, as it deserves, being the fastest machine I know of . . . from a very proud possessor of one." Again from New Zealand: "I am employed as a Motorman and Bus Driver by the Wellington Tramways, and as it is imperative that I should be at work on the tick, I had to have an absolutely reliable machine, hence the reason I bought an ARIEL. It has all the speed one wants; I had it just over the 70 mark with my wife on behind, and then I had m.p.h. in hand. It climbs like a mountain goat. I live up the steepest hill in Wellington; it starts with a gradient of about 1 in 8, then abruptly to

1 in 3 and nasty right-hand corner of 1 in 2½, and then dies away in a steady 1 in 5." This is from an ARIEL Distributor: "Never before has the Ariel created so much interest; our Showroom was thronged, and most flattering opinions were expressed on all sides." Let this enthusiasm—this well-earned popularity—be your guide.





# THE MOTOR CYCLE UPON WHICH THE SUN NEVER SETS



**E**VERYWHERE where motor cycles are ridden you will find ARIEL—forging its way ahead, serving with unflinching endurance thousands of riders of every nationality. In the far-flung outposts of Empire—conquering the old obstacle of distance—throughout the Continent of Europe—in the East, through India, China and Japan and all the diverse countries which comprise this hemisphere. In Australia and New Zealand consignments of ARIEL motor cycles are eagerly awaited by expectant motor cyclists. A never ending chain of ARIEL agents and service depots stretch around the globe, forming an invaluable link between the ARIEL organisation and motor cyclists. If you could walk through the ARIEL Factory, through the immense machine shops with their whirr of machinery—into the great Forge with its gigantic presses, into the assembly shops where ARIEL motor cycles are assembled on the modern Moving Track system, you would

realise how perfect the production methods are, how painstaking the care which ensures that when you receive your ARIEL you get the best that money can buy. Only a factory with the vast resources of the ARIEL organisation could offer you such a perfect Motor Cycle Masterpiece—produced under such high engineering standards—yet at so reasonable a price. With a huge home market and a constant demand from Overseas—coupled with the most modern production methods known to engineers, production costs are lowered—hence the amazing value that comes to you with ARIEL. Get in touch with your nearest Ariel Agent To-day. He will demonstrate to you the qualities of the ARIEL Motor Cycle and be pleased to do all he can to assist you to choose your model. If you do not know where your nearest agent is situated, write to-day direct to Ariel Works Ltd., Selly Oak, Birmingham, England.



*"Shipload after shipload to every corner of the Earth."*



## MODELS 4F/5. & 4F/6. SPECIFICATION



### ENGINE

Four cylinders.

Bore 56 mm. Stroke 61 mm. Capacity 597 c.c.

Bore 51 mm. Stroke 61 mm. Capacity 497 c.c.

The Twin gear-coupled crankshafts are mounted on large diameter ball bearings. The main coupling gears, of specially developed tooth form, are enclosed in a separate oil-fed case within the main crankcase. The light high-tensile steel connecting rods have substantial roller bearing big ends. The half-time shaft, which drives the overhead camshaft and the magneto by specially tensioned roller chains, is driven by hardened and ground gears from the forward crankshaft.

The cylinders are cast "en bloc," are designed to eliminate distortion, and provide adequate cooling. The easily detachable cylinder head has the exhaust passages and special radial induction manifold integral with the casting. The overhead valves are operated by the camshaft directly through rockers, the whole being totally enclosed in an aluminium casting with inspection cover.

### LUBRICATION

The lubrication system employing two gear pumps is of the dry sump type. Oil pumped from the reservoir, which is a separate compartment at the rear of the crankcase, is first forced into the chamber enclosing the main crankshaft gears. From this chamber the oil overflows into troughs and is picked up by dippers on the big ends. The remainder of the internal parts of the engine are lubricated by oil mist. A separate lead from the supply pump is taken to the overhead camshaft and rocker gear. The scavenging pump returns all surplus oil to the reservoir at the rear of the engine.

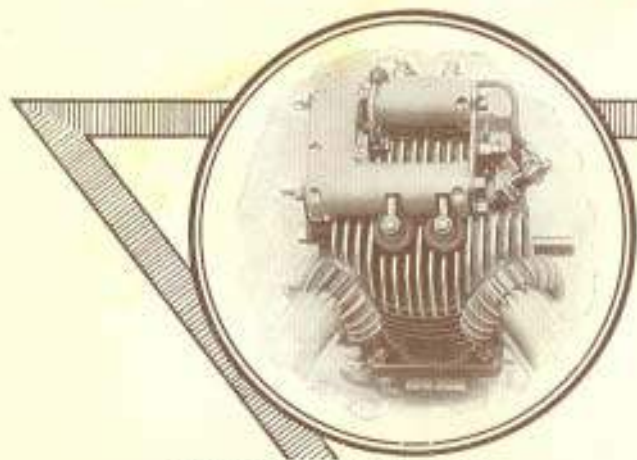
### GEAR RATIOS

|                             |      |      |     |     |
|-----------------------------|------|------|-----|-----|
| Engine Sprocket             | 1st  | 2nd  | 3rd | 4th |
| 21 teeth (Standard Solo)    | 13.8 | 8.6  | 6.5 | 5.2 |
| Model 4 F/6.                |      |      |     |     |
| 19 teeth (Standard Sidecar) | 15.3 | 9.5  | 7.2 | 5.7 |
| Model 4 F/6.                |      |      |     |     |
| 19 teeth (Standard Solo)    | 15.3 | 9.5  | 7.2 | 5.7 |
| Model 4 F/5.                |      |      |     |     |
| 17 teeth (Standard Sidecar) | 17.1 | 10.4 | 8.0 | 6.4 |
| Model 4 F/5.                |      |      |     |     |



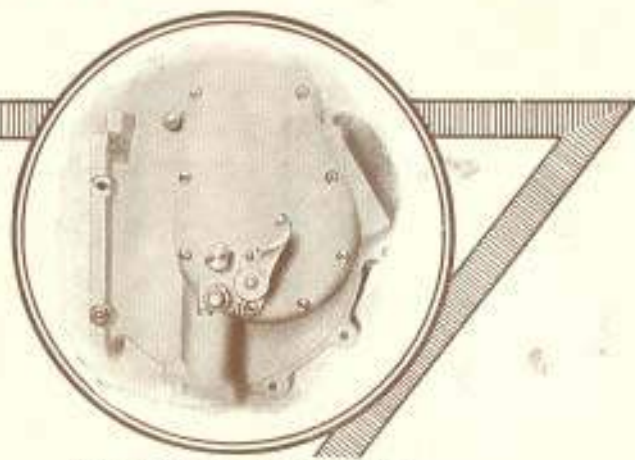


# SPECIAL FEATURES



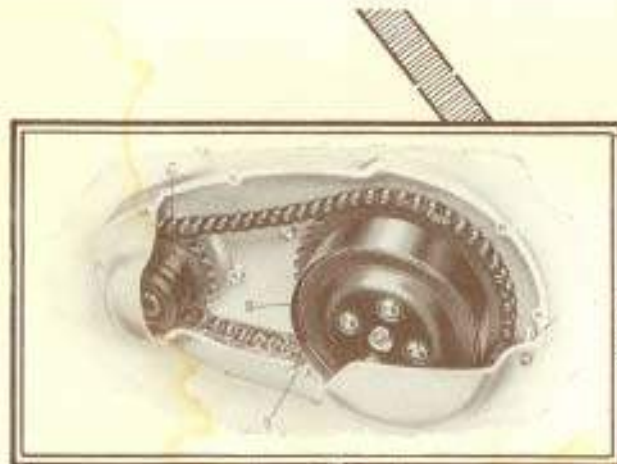
**4-VALVE HEAD** (Models VG and SG).

This illustration shows the disposition of the four valves. The rocker gear is neatly and completely enclosed in an aluminium alloy casing. The 4-valve type of engine gives an astonishing power output, the model VG being one of the fastest 500 c.c. single-cylinder machines offered to the Sporting Rider.



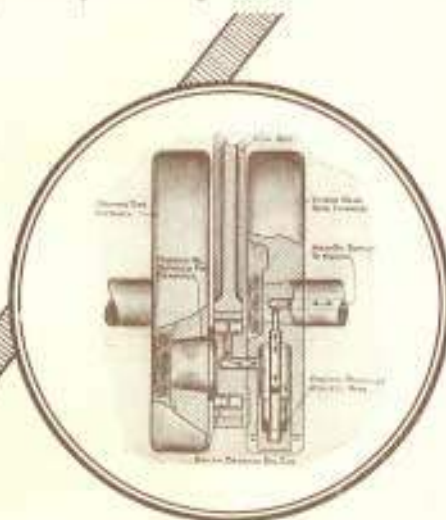
**DECOMPRESSOR** (Models SB and SG).

Ariel Works Ltd. were the pioneers of motor cycle engines with decompressors and, in adopting this fitting again, once more offer a refinement giving the easiest possible starting.



**OIL BATH CHAIN CASE** (Models L, M, S, and 4Fs).

The aluminium primary chain case is designed on the oil bath principle so that the chain runs immersed in oil. This not only eliminates chainwear but gives a soft, inaudible drive, and although the chain runs at high speed it remains constantly cool, adequate lubrication assuring the silky action of the engine shock absorber.

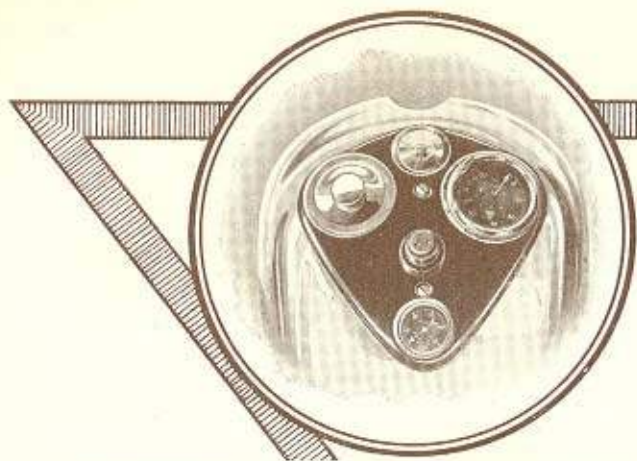


**OIL PURIFIER** (all single-cylinder Models), Pat. No. 353565.

The diagram shows the principle employed in the Patent Ariel Oil Purifier. The short-circuiting of all minute foreign particles which are present in every internal combustion engine, and which act as an abradant to working surfaces and bearings, ensures at least treble the life for an Ariel engine as compared with one not fitted with an oil purifier.

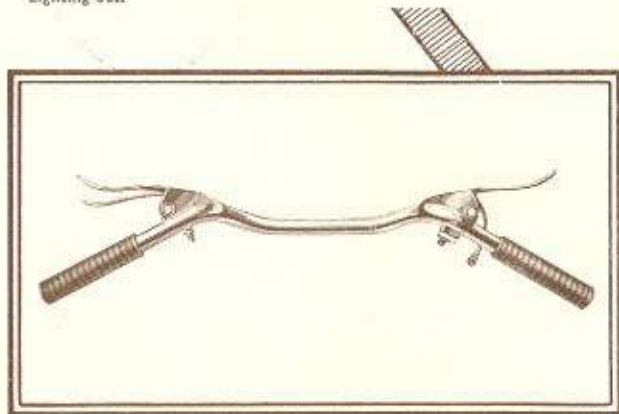


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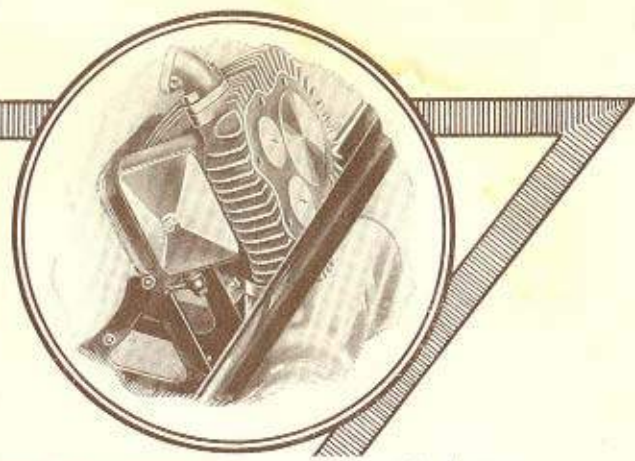
**INSTRUMENT PANEL** (Models SB, SG and 4F). Pat. No. 352218, Reg. No. 764610.

The Instrument Panel is neatly mounted on top of the petrol tank, which is itself mounted on rubber buffers, thus insulating all instruments from engine and road vibrations. The illustration shows the speedometer, the oil gauge, and the patent non-leak quick release filler cap. An eight-day clock may be fitted when ordered as an extra. A panel illuminating lamp, which can also be used as an inspection light, is fitted as standard, with Magdyno Lighting Sec.



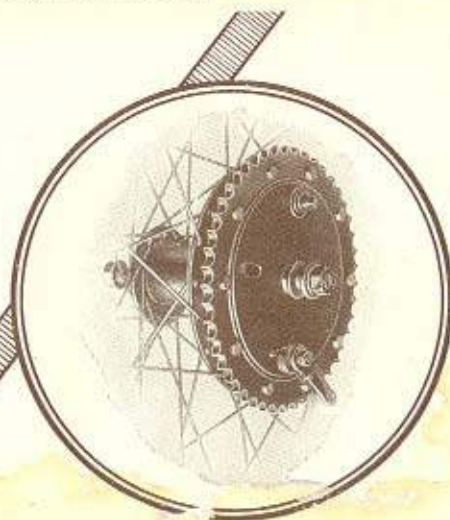
**CLEAN HANDLEBARS** (all Models).

A really "clean" bar with all the disadvantages hitherto associated with this type of bar, removed. The controls fly to the hand, and the cables are instantly accessible. Standard type bar with "clip-on" controls can be fitted as a free option.



**DETACHABLE CYLINDER HEAD** (Models MB, VB and SB as illustrated).

This view shows the cylinder with the detachable cylinder head removed. With this design decarbonisation is simplicity itself. The carburettor and exhaust system remain undisturbed.



**REAR HUB** (Models V, S and 4F).

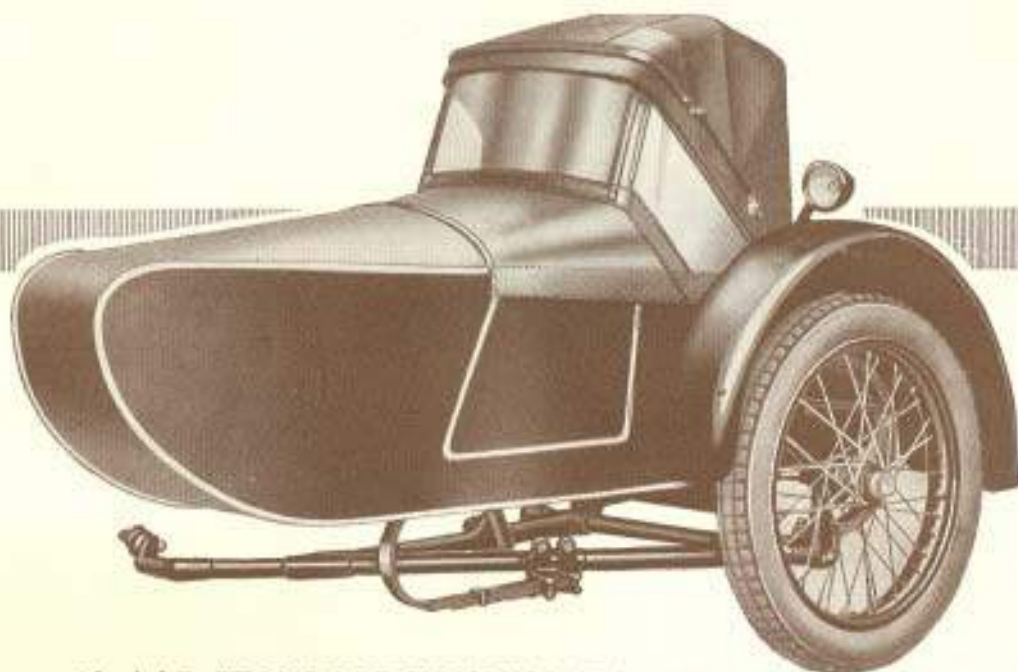
Completely redesigned with a special spoke flange dished to take the spokes at the most favourable angle, giving great strength. The chain sprocket is detachable and the brake size has been increased. The new fulcrum brake adjustment, operating direct on the end of the brake shoes, is embodied in the new hub, making immediate adjustment extremely simple.



## SIDECARS

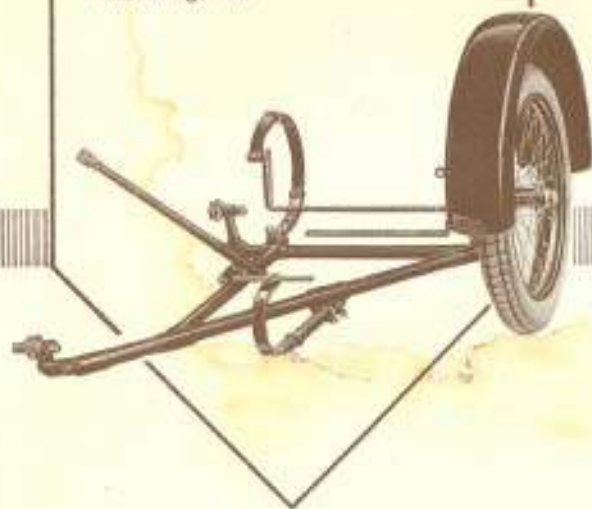
Ariel sidecars are specially designed to fit to Ariel motor cycles, as the motor cycles are specially designed to receive the sidecars. We cannot too strongly advise our customers not to fit sidecars of other makes, the chassis of which were not originally intended to be adapted to our machines, and which may therefore not only prove unsatisfactory in themselves, but also impose unnecessary strains on the frame of the motor cycle.

When ordering it is essential to state whether the sidecar is to be fitted to (i.) a vertical engine model, or (ii.) a sloping engine or 4-cylinder model. The chassis for these two groups are not interchangeable.



**Model R. STANDARD TOURING. Price £16**

Distinctive in design and extremely comfortable, having leather cloth upholstery with a hinged back cushion giving access to locker. The body is finished in black fabric with aluminium mouldings, or polished aluminium to choice, and is complete with all-weather hood and screen.

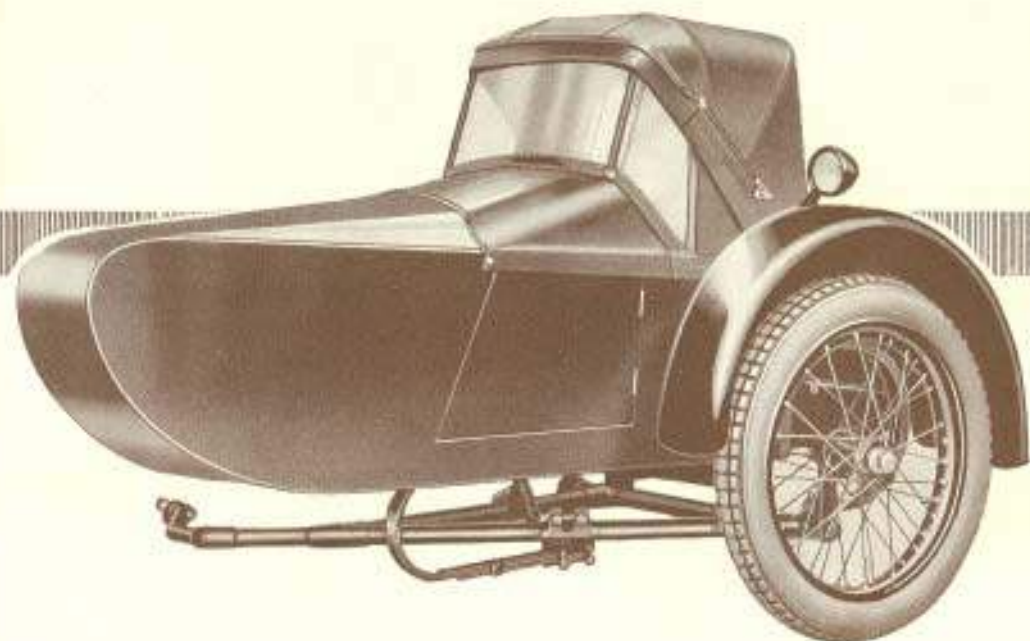


**ARIEL SIDECAR CHASSIS.**

**Price £10**

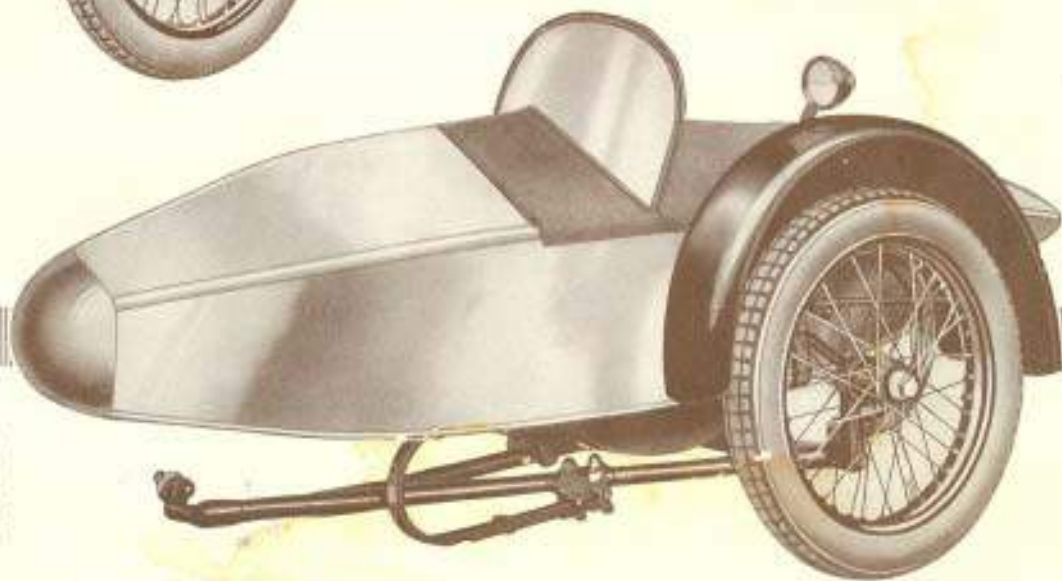
The most scientifically designed chassis on the market. Triangulated and of immense strength, it is attached to the motor cycle frame by large ball joints at front and rear. The third joint, attached to the seat pillar, is spring-loaded so that severe road shocks and vibration are not transmitted to the motor cycle frame. Suspension is by leaf springs front and rear. The sidocar wheel is fitted with taper roller bearings. Each chassis is supplied with a set of tools.





**Model U. SPECIAL TOURING. Price £18**

A sidecar of super-elegant appearance, embodying pressed panels and water-tight apron integral with the windscreen. The body is finished with cellulose in two colours. Prime colour black, with the lozenges on the bonnet and the rear locker finished in ivory. Complete with windscreen and hood.



**Model W. SPECIAL SPORTS. Price £20**

Has a body, finished in polished aluminium, of the highest standard of quality and grace of outline, and meets the wishes of those who desire a sidecar embodying super-sports appearance with touring comforts. Complete with apron, windscreen and pneumatic seat. Spacious locker in the rear portion of body, behind flinged back cushion.



# NEW FEATURES 1932

**BRAKES** (V, S and 4F Models).

Have new fulcrum adjustment operating direct on to the shoe. Increased width of brake lining.

**WHEELS** (MF, V, S and 4F Models).

New rear hubs with independent spoke flanges, reducing spoke stress and giving maximum strength. Chain sprockets are detachable.

**FRONT STAND** (L and M Models).

Independent anchorage on front fork.

**MUDGUARDS** (S and 4F Models).

The rear mudguard on these models has deep-sided valances giving very complete protection to the rider.

**INSTRUMENT PANEL** (S and 4F Models).

New design (Registered) fitting flush with the top of the petrol tank, containing special leak-proof quick release petrol filler cap, Smith's Trip Type Speedometer and oil pressure gauge. Panel light is fitted as standard to electrically equipped machines

and is easily detachable for use as an inspection light. Provision is made for fitting Smith's 8-Day Clock at 30/- extra.

**PETROL TANK** (S and 4F Models).

All-steel welded saddle tank, with an increased capacity of 3½ gallons, fitted with petrol strainer and two-level cork-seated petrol tap giving reserve supply. Fitted with extra large knee grips.

**DECOMPRESSOR** (S Models).

Giving the easiest possible starting.

**TOOL BOX** (all Models).

Large welded all-steel tool box fitted between seat stays and chain stays, containing complete tool kit and grease gun. This fitment is water and rattle proof.

**GEAR CONTROL LEVER** (S and 4F Models).

A new gear lever of great strength, mounted on a rigid adjustable bearing giving positive selective action.



# NEW FEATURES 1932

**FRONT FORK** (V, S and 4F Models).

Completely redesigned, giving very smooth action and perfect road-holding qualities at all speeds.

**GEARBOXES.**

Specially designed and manufactured by Messrs. Burmans for the Ariel Motor Cycle.

(M and L Models). 3 Speeds, hand operated 3-plate cork clutch with shock absorber. Swivel adjustment for primary chain.

(V Models). 3 Speeds, hand operated 4-plate fabric clutch with shock absorber. Parallel adjustment for primary chain.

(S and 4F Models). 4 Speeds, hand operated 4-plate cork clutch with shock absorber. Swivel adjustment for primary chain.

**GEARBOX COVER** (L, M and V Models).

Detachable pressed steel cover enclosing gearbox and oil pipes, to facilitate cleaning and giving an extremely neat appearance.

**CHAIN CASE** (V Models).

A heavy ribbed steel case with automatic lubrication from the main oil supply.

**SILENCERS** (all Models).

Redesigned to give a fuller but more subdued note.

**PANNIER BAGS** (V, S and 4F Models).

Extra large to carry week-end luggage (£2 extra).

**STEERING DAMPER** (M, 2F, V, S and 4F Models).

Redesigned to give a positive action with delicate adjustment.

**HANDLEBARS** (all Models).

A really "clean" bar, having all cables instantly accessible. Standard type Bars, with "clip-on" controls, can be had as a free option.

**FOOTRESTS.**

Easily adjustable to a variety of positions.

**FRAMES.**

Built of high tensile steel lugs and aero quality tubing.

## ALTERNATIVE EQUIPMENT

|   | £  | s. | d. |
|---|----|----|----|
| Lucas 6-volt Magdyco Solo (S, M and V Models)                     | 5  | 10 | 0  |
| Lucas 6-volt Magdyco Solo (S and 4F Models), includes parcel lamp | 5  | 15 | 0  |
| Lucas 6-volt Magdyco with Sidecar (extra all Models)              | 10 | 0  | 0  |
| M.L. 6-volt Magnix for MB, M.1F and L Models                      | 5  | 5  | 0  |
| Lucas Acetylene Lighting Set for all Models                       | 1  | 10 | 0  |
| Lucas Spartan Horn  | 12 | 0  | 0  |
| Lucas Alcega Horn   | 1  | 5  | 0  |
| Lucas Bull Horn (No. 63)  | 2  | 5  | 0  |
| Steering Damper on MB, M.1F and L Models (not 30) - Tax           | 7  | 5  | 0  |
| Carrier (all Models)  | 18 | 0  | 0  |
| Smith's Trip Type Speedometer (L, M and V Models)                 | 2  | 5  | 0  |
| Smith's 8-Day Clock (S and 4F Models)                             | 1  | 10 | 0  |
| Pillion Seats (all Models)  | 17 | 6  | 0  |
| Pillion Footrests   | 7  | 0  | 0  |
| Valanced Front Mudguard on L, M, V and 4F Models                  | 5  | 0  | 0  |
| Close Ratio Gearbox (V Models)                                    | 10 | 0  | 0  |
| Foot Change to Gearbox (V, S and 4F Models)                       | 15 | 0  | 0  |
| 25 x 3-25 Dunlop Tyres on MB, M.1F and L Models (not 30) - Tax    | 15 | 0  | 0  |
| 26 x 3-25 Dunlop Tyres on MB, M.1F and L Models (not 30) - Tax    | 1  | 0  | 0  |
| 26 x 3-25 Dunlop Tyres on M.2F                                    | 5  | 0  | 0  |
| 26 x 3-25 Fort Dunlop Tyres on V, S and 4F Models                 | 15 | 0  | 0  |
| 26 x 3-5 Dunlop Tyres on V, S and 4F Models                       | 15 | 0  | 0  |
| 26 x 3-5 Fort Dunlop Tyres on V, S and 4F Models                  | 1  | 0  | 0  |

(For Sidecar Combinations the above Tyre extra prices are increased by 30 per cent.)

## NOTES OF INTEREST

|                                 |                   |
|---------------------------------|-------------------|
| Saddle Height (all Models)      | 26½ in.           |
| Width of Handlebar (all Models) | 30 in.            |
| Width of Combination (average)  | 40 in.            |
| Wheelbase—                      |                   |
| V, S and 4F Models              | 55 in.            |
| M and L Models                  | 50½ in.           |
| Length (overall)—               |                   |
| V, S and 4F Models              | 86 in.            |
| M and L Models                  | 78 in.            |
| Ground Clearance (all Models)   | 4½ in.            |
| Petrol Consumption—             |                   |
| V, S and 4F Models              | approx. 80 m.p.g. |
| L Models                        | 100 m.p.g.        |
| M Models                        | 90 m.p.g.         |
| Petrol Capacity—                |                   |
| S and 4F Models                 | 3½ gallons.       |
| V Models                        | 2½ gallons.       |
| M and L Models                  | 2 gallons.        |
| Oil Capacity—                   |                   |
| L, M, V and S Models            | ½ gallon.         |
| 4F Models                       | 5 pints.          |
| A.C.U. Rating—                  |                   |
| 600 c.c.                        | 6-00 h.p.         |
| 550 c.c.                        | 5-50 h.p.         |
| 500 c.c.                        | 5-00 h.p.         |
| 350 c.c.                        | 3-50 h.p.         |
| 250 c.c.                        | 2-50 h.p.         |





T O - M O R R O W ' S M O T O R C Y C L E A V A I L A B L E T O - D A Y

## Notice

We do not appoint agents for the sale on our behalf of our motor cycles or other goods, but we assign to cycle and motor cycle Dealers areas in which we supply to such Dealers, exclusively for re-sale in such areas. No such Dealer is authorised to transact any business, give any warranty, make any representation or incur any liability on our behalf.

THE FOLLOWING IS A COPY OF THE

## Guarantee

GIVEN BY DEALERS IN ARIEL MOTOR CYCLES

We give the following guarantee with our bicycles, motor cycles, motor cycle combinations and sidecars, which is given in place of any implied conditions, warranties, or liabilities whatsoever statutory or otherwise all such implied conditions, warranties, and liabilities being in all cases excluded. Any statement, description, condition or representation contained in any catalogue, advertisement leaflet or other publication, shall not be construed as enlarging, varying or overriding this guarantee. In the case of machines which have been used for "hiring out" purposes, or from which the trade mark, name 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 date of purchase, and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part in exchange for the part of the bicycle, motor cycle, motor cycle combination and sidecar which may have proved defective. We do not undertake to replace or refix, or bear the cost of replacing or refixing such new part in the bicycle, motor cycle, motor cycle combination and sidecar. We undertake, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As the bicycles, motor cycles, motor cycle combinations and sidecars are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others, the following acts:—

1. The attaching of a sidecar to the motor cycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.
2. The use of a motor cycle, or of a motor cycle and sidecar combined, when carrying more persons, or a greater weight than that for which the machine was designed by the manufacturers.
3. The attaching of a sidecar to a motor cycle by any form of attachment not provided, supplied or approved by the manufacturers or to a motor cycle which is not designed for such use.

Any bicycle, motor cycle, motor cycle combination or sidecar sent to us to be plated, enamelled or repaired will be repaired upon the following conditions, 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 three months only from the time such work shall have been executed or until the expiration of the six months above referred to and this guarantee is in lieu and in exclusion of any common law or statute warranty or condition 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 bicycles, motor cycles, motor cycle combinations or sidecars, or in any part supplied by way of exchange before referred to, it must be sent to us **Carriage Paid**, and accompanied by an intimation from the Owner that he desires to have it repaired or exchanged free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the date of purchase, or the date when the alleged defective part was exchanged as the case may be.

Failing compliance with the above, such articles will lie here **at the risk of the owner** and this guarantee and any implied guarantee, warranty or condition shall not be enforceable.

We do not guarantee specialities such as tyres, saddles, chains, lamps, etc., or any component parts supplied to the order of the Purchaser differing from our standard specifications supplied with our bicycles, motor cycles, motor cycle combinations, sidecars or otherwise.



September 1st, 1931

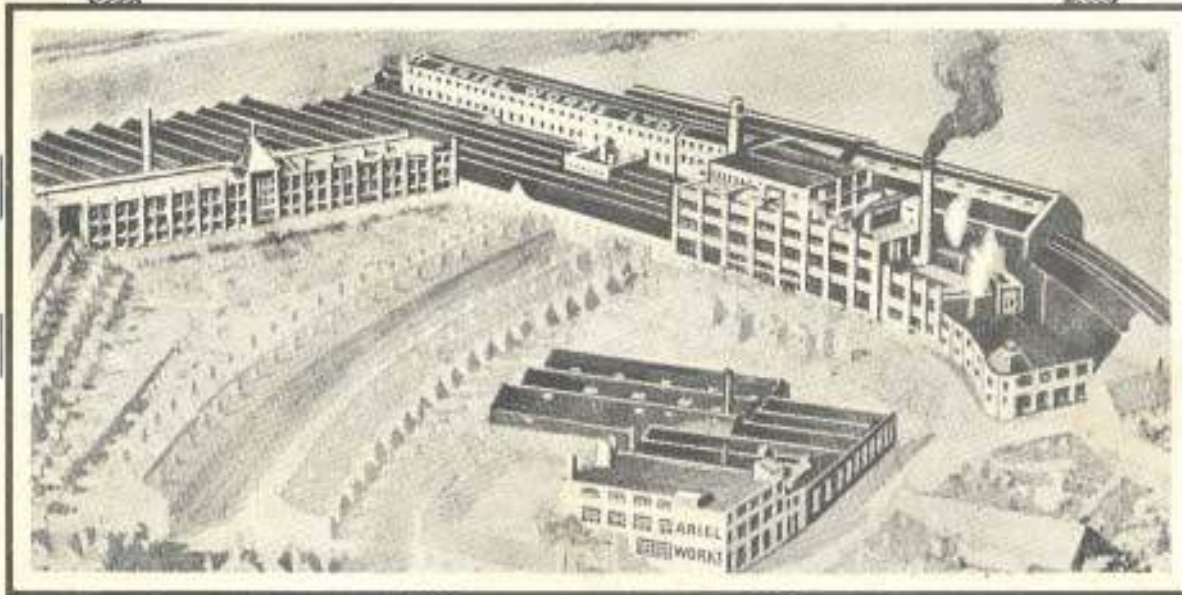
ARIEL WORKS LTD., SELLY OAK, BIRMINGHAM, ENGLAND

Telephone: SELLY OAK 1381 (8 lines)

Telegram: ARIEL, SELLY OAK



# THE GREAT ARIEL ORGANISATION



ARIEL WORKS LTD., one of the pioneer manufacturers of Motor Cycles, is an outstanding example of modern production methods. With a total floor space of some 500,000 square feet, employing the latest machines and methods, the output capacity of this great organisation is ever growing. The constant, unremitting striving, year after year, of the greatest

experts, the skill of the highly specialised personnel of this great motor cycle factory, with its vast resources, have produced for you, whatever your purpose may be, touring or speed, the ideal Motor Cycle. The quality of the Ariel Motor Cycle is the outcome of a policy of quantity output but quality methods.