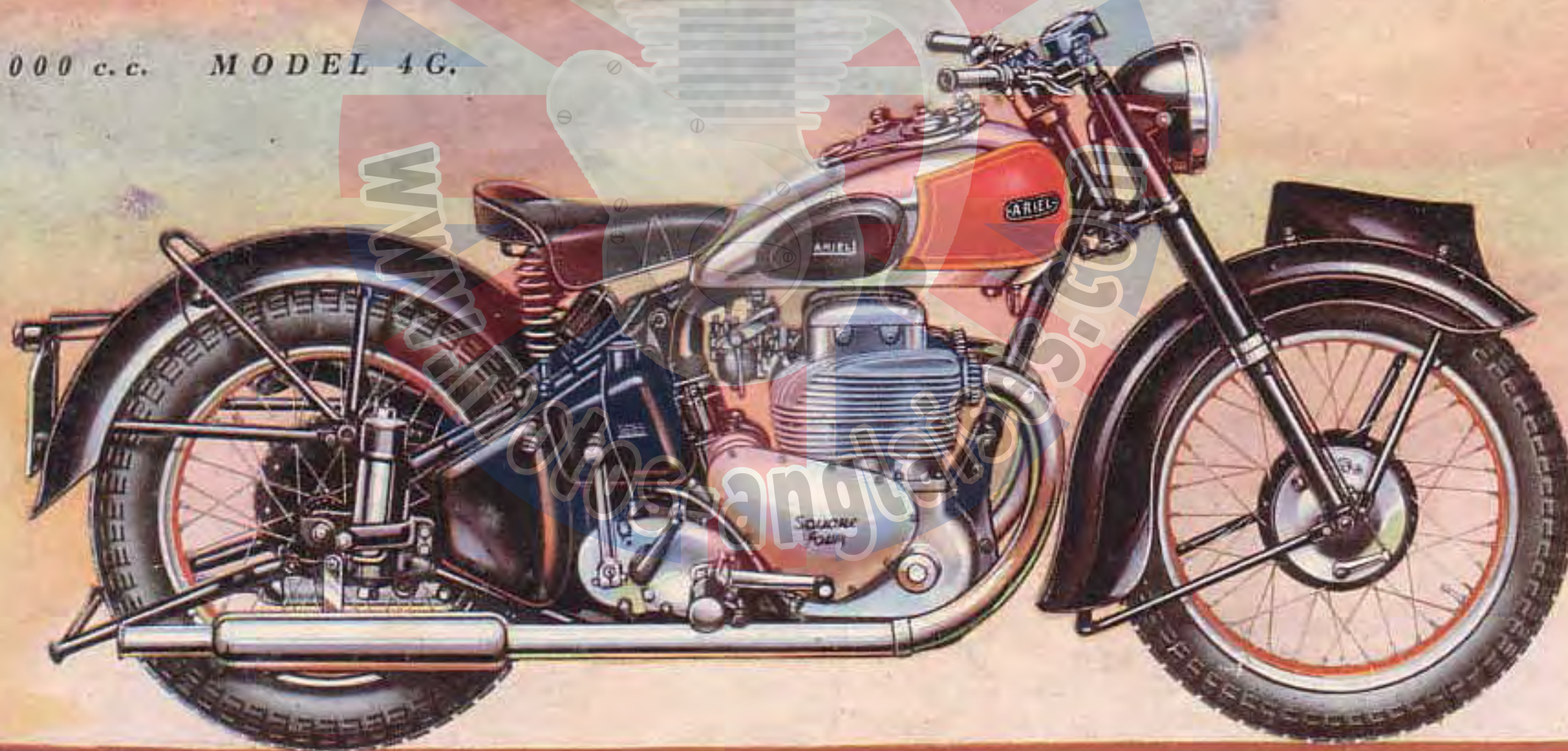
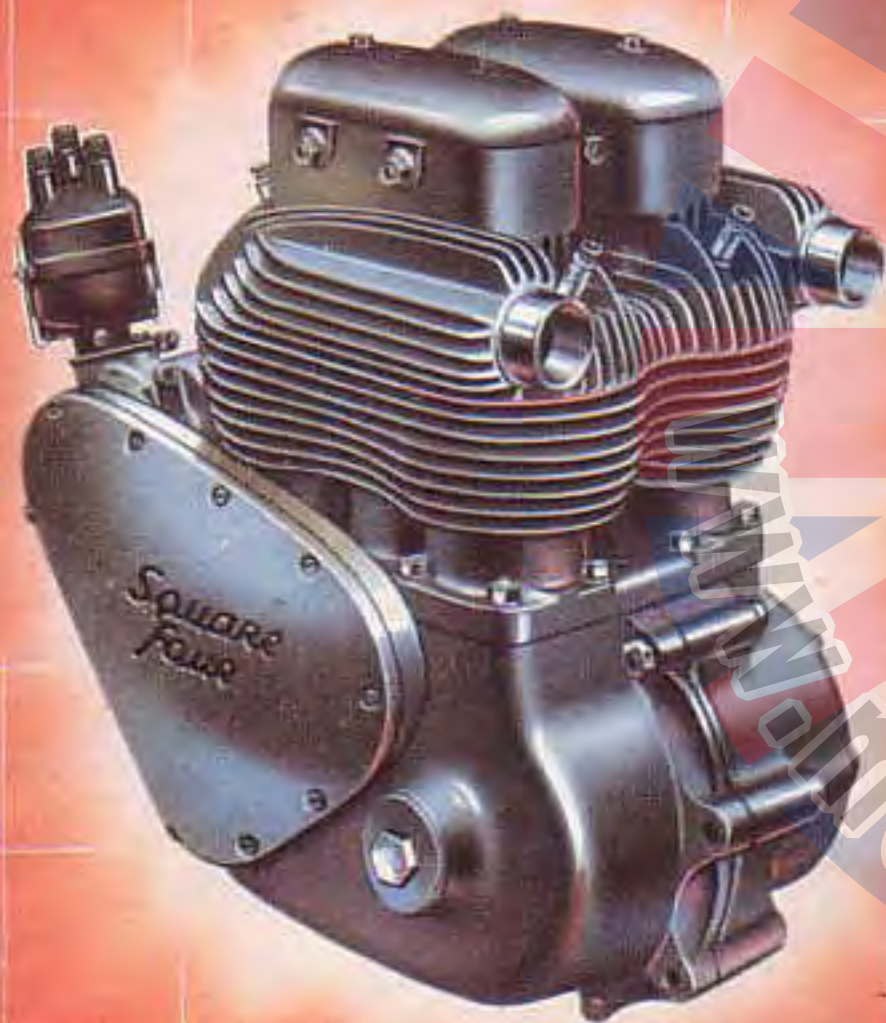


THE SQUARE FOUR

The World's most Exclusive Motor Cycle

1000 c.c. MODEL 4G.





**The Power Unit of the Square 4, the
World's most exclusive Motor Cycle**

SPECIFICATION OF THE SQUARE FOUR 1000 c.c. MODEL 4G

Engine : 65 × 75 mm. = 997 c.c. ($2.56 \times 2.95 = 60.8$ cubic inches). Aluminium alloy cylinders are cast "*en bloc*" in square formation. Fitted with wear resisting detachable sleeves. Aluminium alloy cylinder heads with valve seat inserts. Sparking plug holes are bronze bushed. Enclosed and automatically lubricated overhead valves. Twin counterbalanced alloy steel crankshafts interconnected by hardened and ground gears. Aluminium alloy con rods with replaceable white metal liners. Pistons 6.0 compression ratio (6.8 compression ratio can be supplied to order for use with 80 octane fuel).

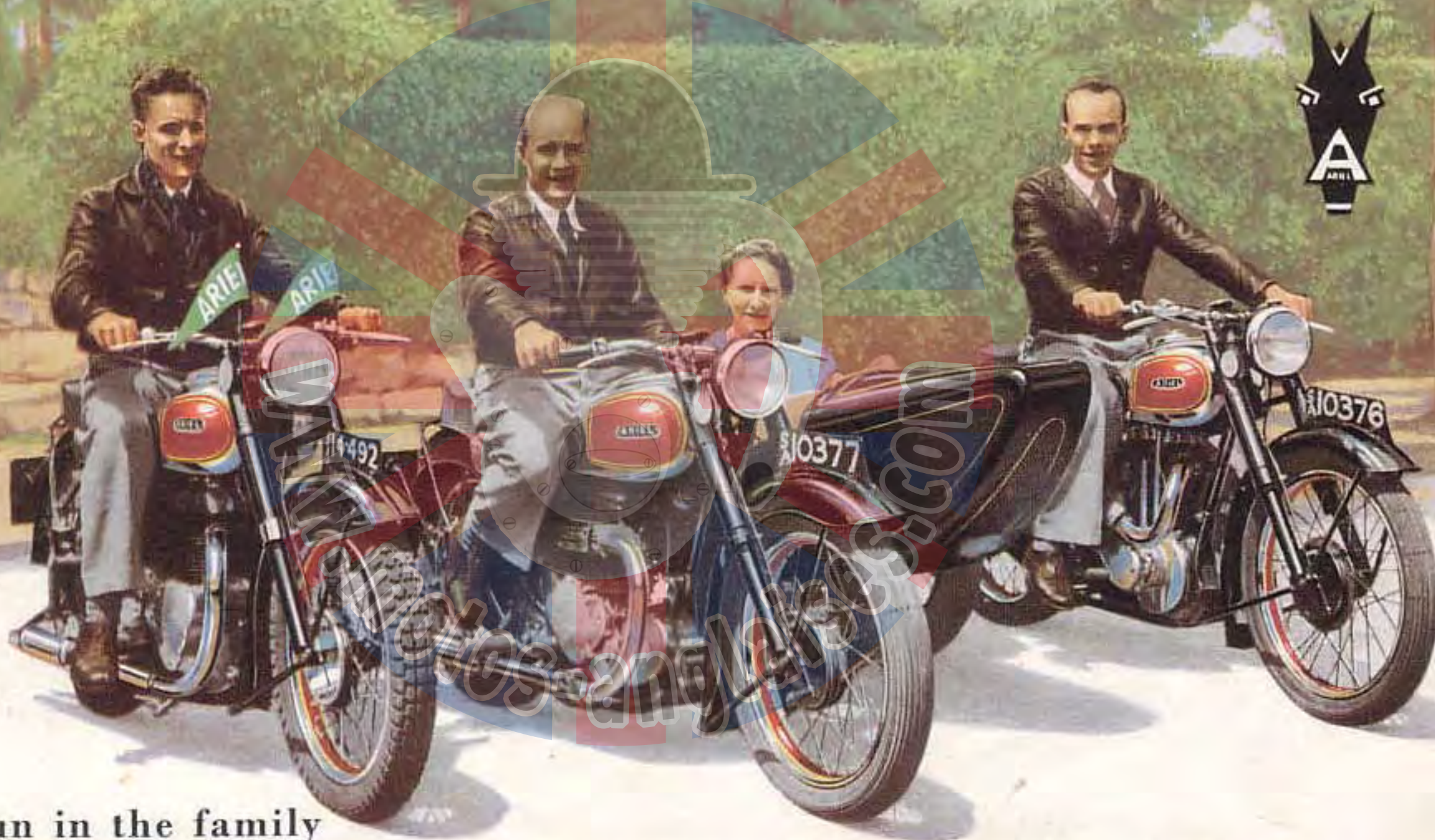
Lubrication : Dry sump with dual plunger pump, feeds oil to bearings under pressure. Scavenger pump returns filtered oil to separate $\frac{3}{4}$ gallon (3.4 litres) tank.

Electrical Equipment : 70 watt voltage controlled dynamo, incorporating distributor with automatic ignition timing. Large 6 volt coil. Headlamp with 30 watt bulb.

Wheels : Dunlop studded tyres 4.00 × 18 rear, 3.25 × 19 front. Ribbed front tyre optional. Chrome rims, red centres, lined gold. (Black centres optional). Quickly detachable rear wheel.

Prop Stand : Fitted on near side of machine.

Tank : $3\frac{1}{4}$ gallon (16 litres) capacity. Superbly finished in chrome and red, lined gold. (Chrome and black, lined gold, optional.)

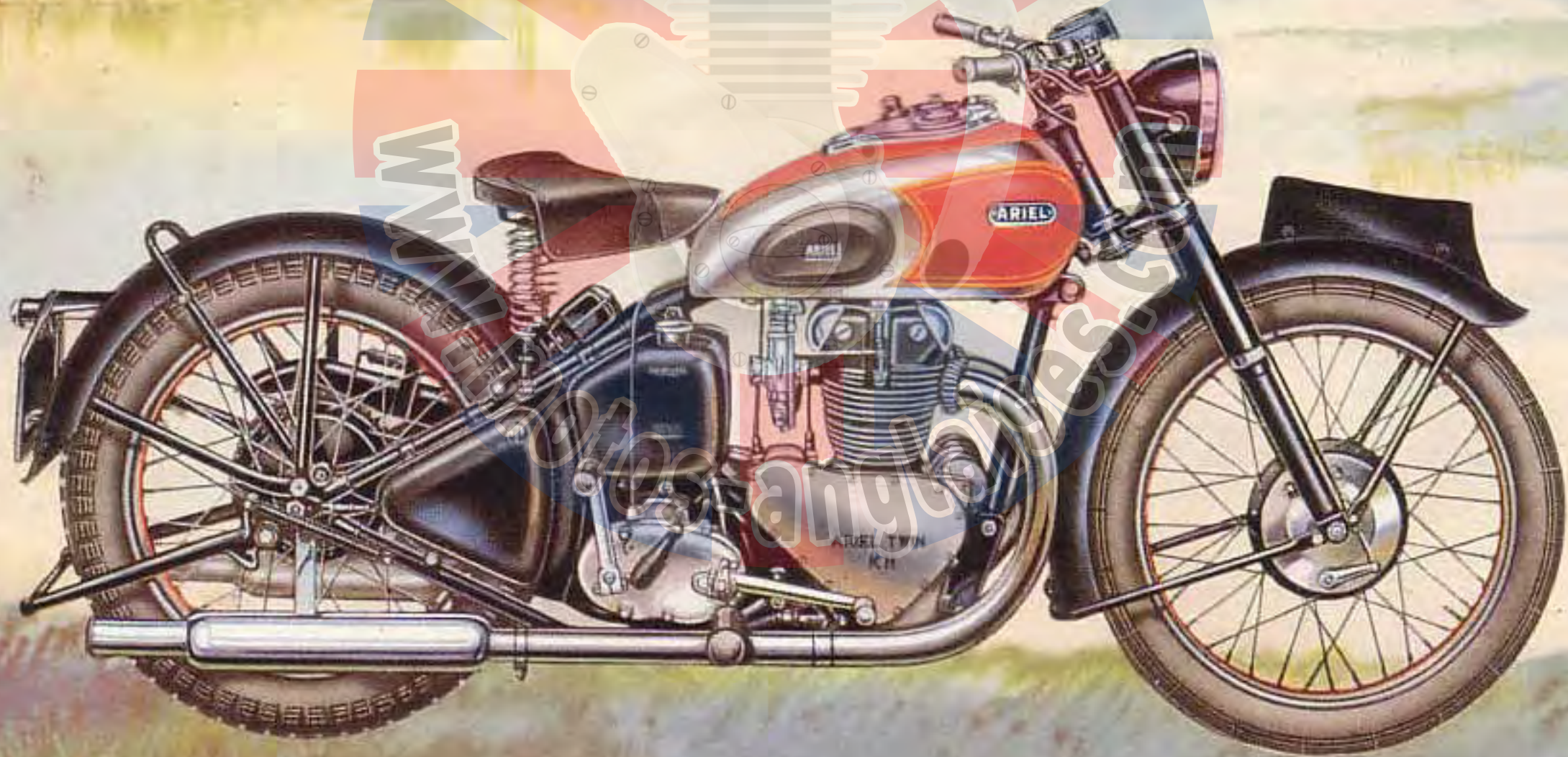


They run in the family

Here's amazing testimony of Ariel popularity. Meet the Surmans of South Australia. Veteran Ariel enthusiast Bill Surman (with Mrs. Surman in sidecar) on his 1,000 c.c. Square Four, and his sons, riding an Ariel 500 c.c. Twin, and an Ariel 500 c.c. Red Hunter single cylinder respectively. Yet another typical example of preference for Ariel by generation after generation of Knowledgeable Motor Cyclists.



THE RED HUNTER TWIN 500 c.c. MODEL KH and



DE LUXE TWIN 500 c.c. MODEL KG

THE CANADIAN ROCKIES

Mountains and sky mirrored in the lapis-lazuli of the Lakes—Twin worlds of unsurpassed grandeur and, talking about Twins, the Ariel Models KH and KG are also in a class by themselves.

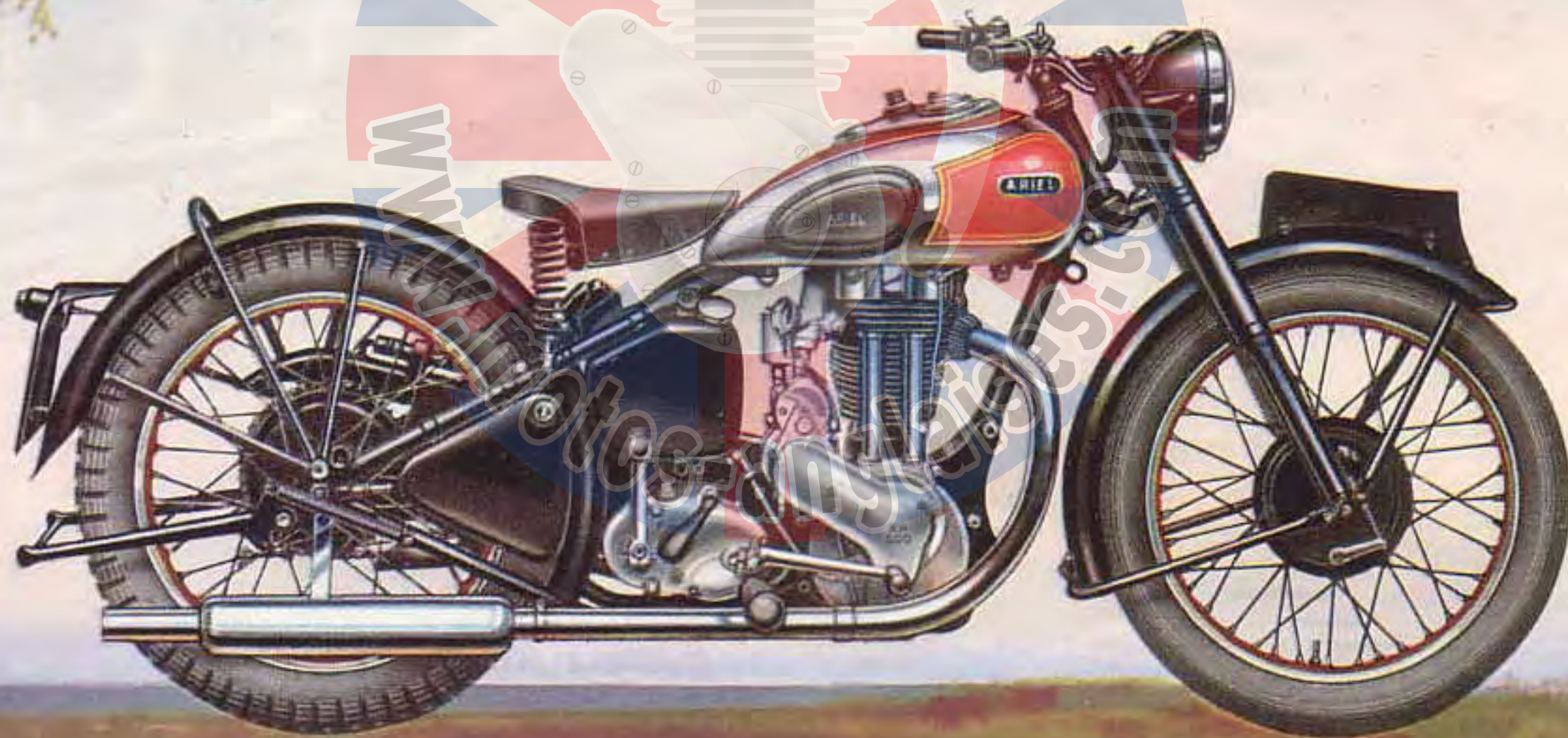
Engine KG : 63×80 mm. = 498 c.c. ($2.48 \times 3.15 = 30.4$ cubic inches). Vertical O.H.V., cylinder heads and rocker boxes in one casting. Balanced crankshafts forged in one piece, carried on a large roller bearing on drive side and plain white metal bearing on timing side. Light alloy connecting rods with replaceable white metal liners. Light alloy pistons 6.8 compression ratio. Twin camshafts driven by automatically adjusted Duplex chain. Oil circulates by double gear pump. 25-35 lb. oil pressure to main bearings and rockers. $\frac{3}{4}$ gallon (3.4 litres) separate oil Tank. Magneto with automatic ignition control. 56 watt dynamo.

Engine KH : Specification as model KG, but has polished ports and cylinder heads and is specially bench tested and tuned. 7.5 compression ratio pistons can be supplied to order for use with 80 octane fuel.

Carburettor : Amal single control by twist grip. Large bore Amal on Model KH with Petroflex pipe. **Wheels :** KG—Dunlop tyres 3.50×19 rear, 3.25×19 front. Chrome rims, black centres, lined gold (Ariel green centres optional). KH—Dunlop tyres 3.50×19 rear, 3.00×20 ribbed front. Chrome rims, red centres, lined gold. **Prop Stand :** Fitted on near side of machine. **Tank :** $3\frac{1}{4}$ gallon (17.0 litres) capacity. KG—Superbly finished in chrome and black, lined gold. (Chrome and Ariel green, lined gold, optional.) KH—Superbly finished in chrome and red, lined gold.



THE RED HUNTER MODEL VH 500 c.c.



and MODEL NH 350 c.c.

THE NEW YORK SKYLINE

Manhattan Island, the world's most streamlined silhouette—Gateway to the New World. Traded in 1626 from the Indian Red Hunters—what could be more fitting, in 1950, than that Ariel Red Hunters ride the Great White Way and all highways going North, South, East and West.

Engine VH: 81.8×95 mm. = 497 c.c. ($3.22 \times 3.74 = 30.4$ cubic inches) O.H.V. Specially bench tested and tuned. Ground and highly polished ports and cylinder head. Polished forged steel flywheels. Large diameter mainshafts mounted on two heavy duty roller bearings and one ball bearing. Extra large double roller bearing big end with duralumin cage. Aluminium alloy piston 6.8 compression ratio.

Engine NH: 72×85 mm. = 347 c.c. ($2.835 \times 3.346 = 21.2$ cubic inches) O.H.V. Specially bench tested and tuned. Ground and highly polished ports and cylinder head. Polished forged steel flywheels. Ball bearings on both sides of mainshaft. Double roller bearing big end. Aluminium alloy piston 6.2 compression ratio.

Lubrication: Dry sump system employing dual plunger pump. VH— $\frac{3}{4}$ gallon (3.4 litres), NH— $\frac{1}{2}$ gallon (2.3 litres) capacity. Separate oil tank.

Exhaust System: VH—Single port low level pipe. NH—Single or double port, low level pipes.

Wheels: Dunlop tyres 3.25×19 rear, 3.00×20 ribbed front. Chrome rims, red centres, lined gold.

Prop Stand: Fitted on near side of machine.

Tank: VH— $3\frac{1}{4}$ gallon (14.8 litres) capacity. NH— $2\frac{1}{2}$ gallon (11.4 litres) capacity. Superbly finished in chrome and red, lined gold.

Engine VG : 81.8 × 95 mm. = 497 c.c. (3.22 × 3.74 = 30.4 cubic inches). High efficiency engine, completely enclosed valve and rocker gear. Automatically lubricated under pressure. High tensile steel connecting rod. Aluminium alloy piston 6.8 compression ratio.

Engine NG : 72 × 85 mm. = 347 c.c. (2.835 × 3.346 = 21.2 cubic inches). High efficiency engine, completely enclosed valve and rocker gear. Double roller bearing big end. Aluminium alloy piston 6.2 compression ratio.

Lubrication : Dry sump system employing dual plunger pump. VG— $\frac{7}{8}$ gallon (3.4 litres), NG— $\frac{1}{2}$ gallon (2.3 litres) capacity. Separate oil tank.

Exhaust System : VG—Single port low level pipe. NG—Single or double port low level pipes.

Wheels: Dunlop tyres 3.25 × 19. Chrome rims, black centres, lined gold. (Ariel green centres, optional.)

Tank : VG—3 $\frac{1}{4}$ gallon (14.8 litres) capacity. NG—2 $\frac{1}{2}$ gallons (11.4 litres) capacity. Superbly finished in chrome and black, lined gold. (Chrome and Ariel green, lined gold, optional.)

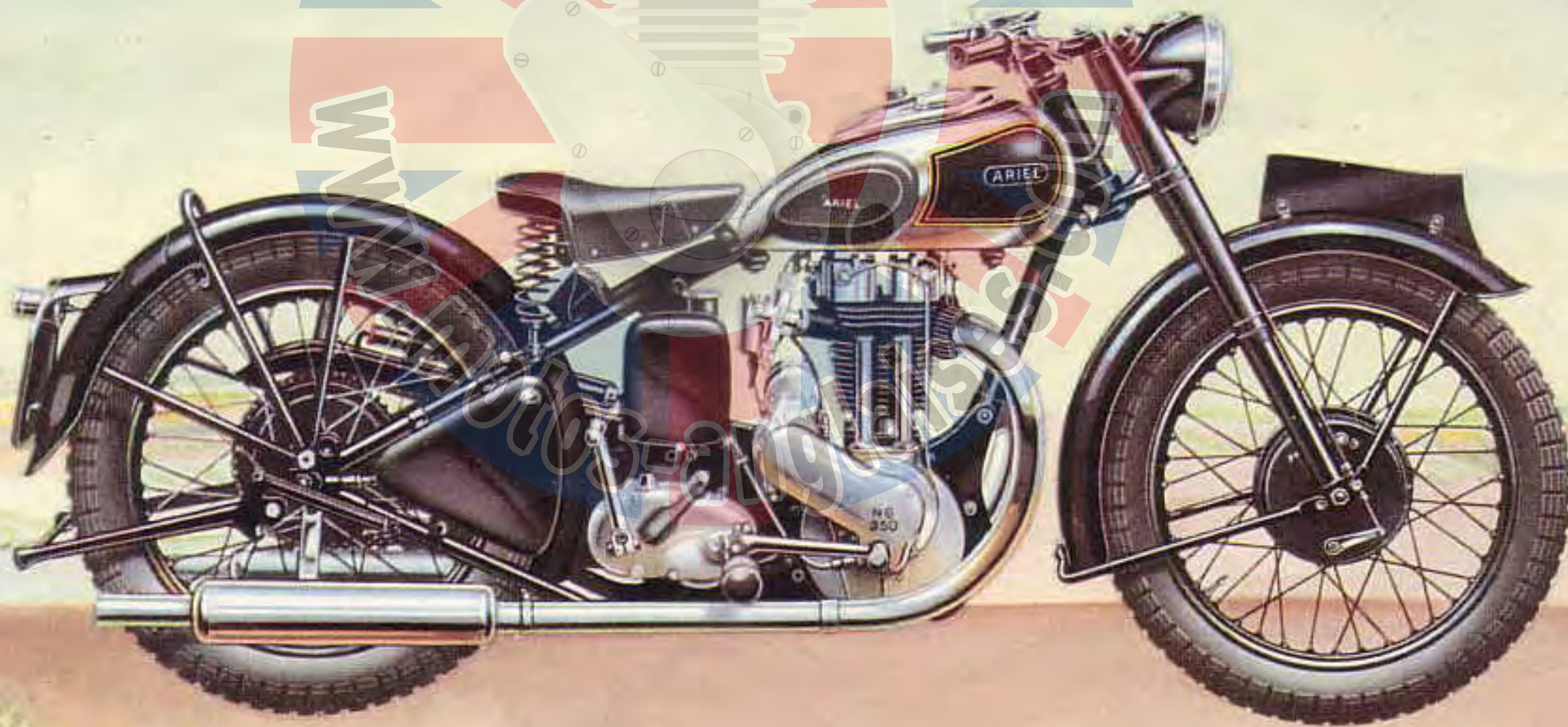
THE O.H.V. DE LUXE

HOLLAND IN THE SPRING

The Great Flower Festival known as "Bulb Sunday" is a sight no Motor Cyclist touring Holland should miss. In fact with its full glory of acre after acre of amazing colours, it would be next to impossible to do so. There's plenty of "colour" in the British Motor Cyclist's life too—on an Ariel De Luxe, the ideal Touring Machines at home or abroad.



MODEL VG 500 c.c. and MODEL NG 350 c.c.



THE SIDE VALVE

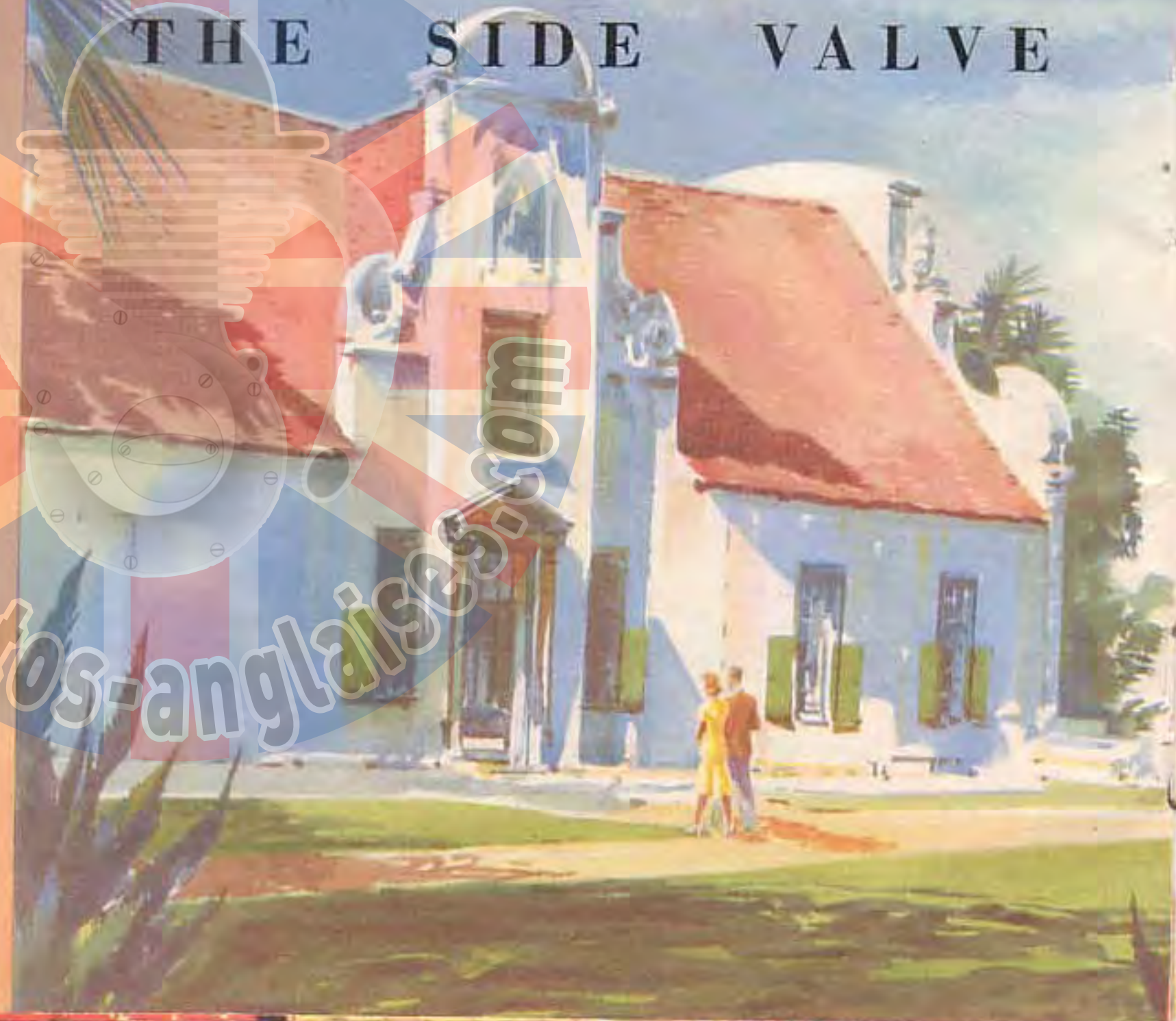
Engine : $86.4 \times 102 \text{ mm.} = 598 \text{ c.c.}$ ($3.4 \times 4.01 = 36.5$ cubic inches). Totally enclosed valve springs. Double roller bearing big end. Aluminium alloy piston 5.0 compression ratio.

Lubrication : Dry sump system $\frac{3}{4}$ gallon (3.4 litres) capacity. Separate oil Tank.

Exhaust System : Large diameter pipe with streamlined silencer.

Wheels: Dunlop tyres 3.25×19 . Chrome rims, black centres, lined gold. (Ariel green centres optional.)

Tank : $3\frac{1}{4}$ gallon (14.8 litres) capacity. Superbly finished in chrome and black, lined gold. (Chrome and Ariel green, lined gold, optional.)

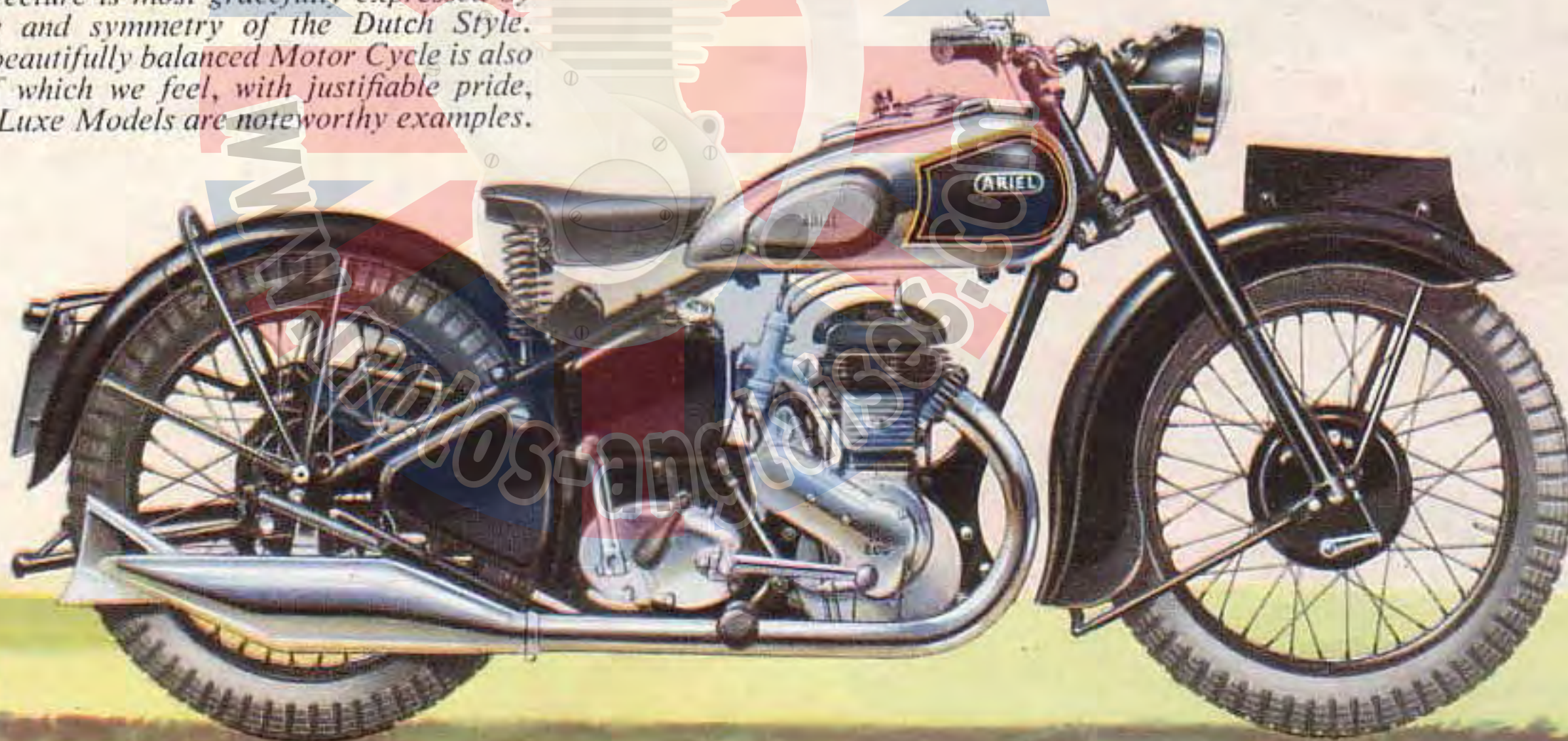


DE LUXE 600 c.c. MODEL VB



IN OLD CAPE PROVINCE

Art in Architecture is most gracefully expressed by the harmony and symmetry of the Dutch Style. Designing a beautifully balanced Motor Cycle is also a fine art of which we feel, with justifiable pride, the Ariel De Luxe Models are noteworthy examples.





GENERAL

Frame : Cradle type, built of Aero quality tubes. All joints are brazed, ensuring ample strength and torsional stiffness. Special lugs are provided for either near or offside fitting Sidecars.

Forks : Telescopic with hydraulic control. Large bearing surfaces. Automatically lubricated eliminating all adjustments. 6½ in. total travel. Steering damper incorporated.

Wheels : ① Immensely strong. Rear chain sprocket detachable. Quickly detachable rear wheel can be fitted to any model at an extra charge. (Standard on Model 4G.) ②

Mudguards : Robust ribbed section steel guards. Valanced front on models 4G, VG and VB. Tail of rear guard hinged to facilitate wheel removal.

Brakes : 7 in. diameter high tensile iron brake drums, ensuring powerful and progressive action with fulcrum adjustment.

Gearbox : Four Speed, foot control, clutch lever enclosed in rubber moulding.

Transmission : Engine shaft shock absorber. Polished aluminium oilbath primary chaincase. Rear chain fully protected.

Stands : Forged steel girder spring up rear and strong tubular front. Lifting handle on rear mudguard.

Footrests : Adjustable. Special lugs are provided for pillion footrests.

Handlebar Controls : Twist grip for throttle. Clutch and Front Brake levers. Dip Switch and Horn Button. (Ignition, Exhaust Lifter and Air Levers on Single Cylinder models.)

Airy Minarets and Ariel Motor Cycles graphically illustrate the meeting and merging of East and West in the Modern World of Today.

SPECIFICATION

Saddle : Aero. Adjustable soft top.

Instrument Panel : Rubber insulated tank mounted, incorporating (Model 4G) quick release cam operated petrol filler cap, oil gauge, lighting and ignition switch, warning light, ammeter and inspection lamp. (Models KH and KG.) Quick release cam operated petrol filler cap, oil gauge, lighting switch, ammeter and inspection lamp. (Single Cylinder models.) Quick release cam operated petrol filler cap, oil gauge, speedometer and inspection lamp.

Speedometer : Model 4G, KH, KG, fork mounted and Model VH 120 m.p.h. (180 k.p.h.), Models VG, NH, NG and VB 80 m.p.h. (140 k.p.h.).

Ignition and Lighting: Model 4G coil ignition. Models KH and KG, separate dynamo and magneto. Other Models 6 volt magdyno. All models 7½ in. headlamp, handlebar controlled dimmer, tail light and compensating voltage control. The battery is mounted on a strong steel platform under the saddle, is easily accessible and is entirely free from vibration.

Horn : Electric, mounted on nearside seat stay (when an air cleaner is fitted to Model 4G the Horn is mounted on the front Engine plate).

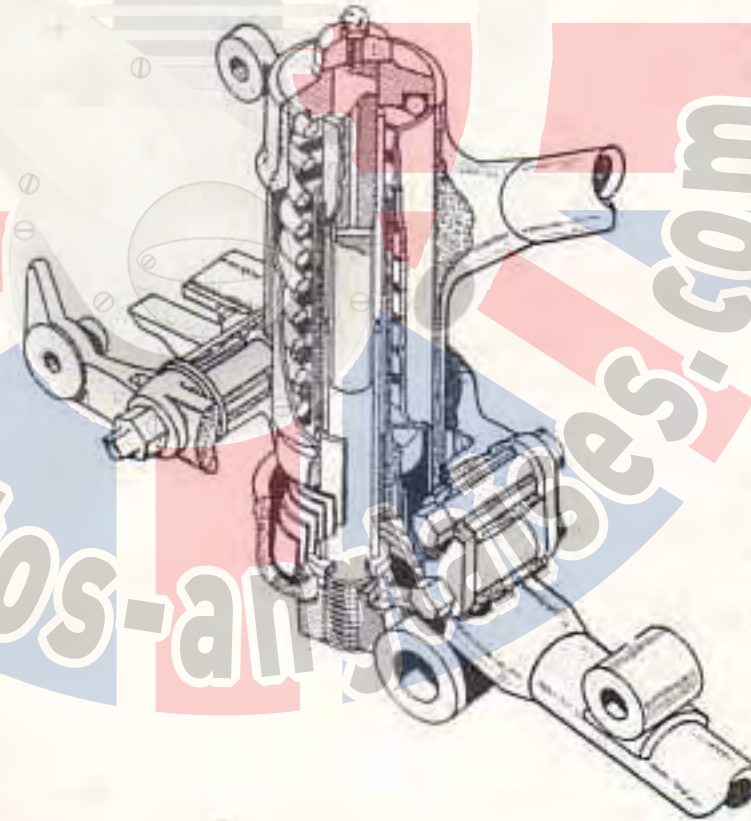
Equipment : Large all steel toolbox with screw fastening. Complete kit of tools, grease gun and tyre inflator.

*Whether it is the Grand Canyon in Colorado
or the Shivering Mountain in Derbyshire—
Ariel is the answer to Holiday Horizons.*



THE ARIEL *patented* SPRING FRAME

alone gives these outstanding advantages:—Exceptional comfort for rider and passenger • Improved road holding and braking • Complete lateral rigidity, solo or sidecar • Constant chain tension • $3\frac{1}{2}$ " total movement • Total enclosure of working parts • Reduced tyre wear.



When the Spring Frame is operating, the swinging arms in conjunction with the sliding members allows the rear wheel to move not only up and down but also in a semi-circular path centred round the gearbox sprocket, with the result that throughout the whole range of movement the rear chain tension remains constant and snatch or overloading is prevented.

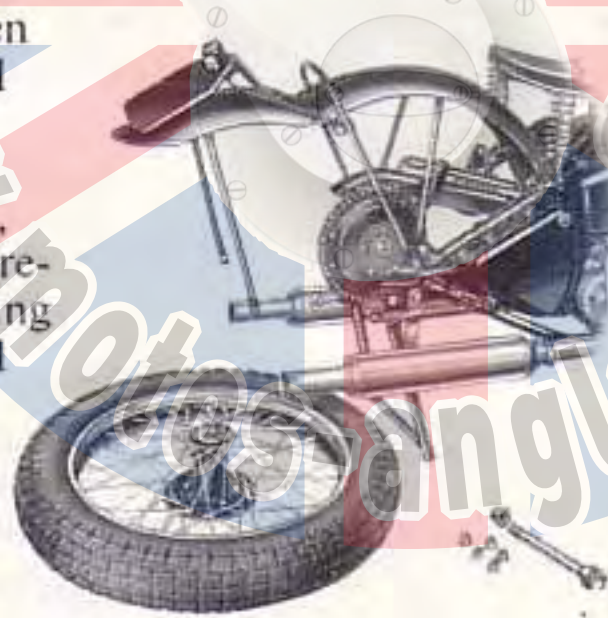
The exceptional lateral rigidity, especially when a sidecar is fitted, is achieved by the method of

Nocturne in Blue and Silver—"far from the Mudding Crowd" all the magic of Moonlight Riding is yours on Ariel.

anchoring the swinging arms to the frame members. The load carrying springs are robust yet flexible and are designed for solo, pillion or sidecar use. Rebound springs are also fitted which operate against the load carrying springs, giving a progressive action and superb riding comfort.

QUICKLY DETACHABLE REAR WHEEL

Tyre changing or repair has been greatly simplified with the new Ariel Detachable Wheel, because the wheel and hub can be removed leaving intact the rear sprocket, chain and brake mechanism. To remove the wheel unscrew five securing nuts and wheel spindle with special spanners provided, withdraw the spindle and distance piece and raise the hinged portion of the rear guard. The illustration shows the operation completed.



Where time tranquilly ripples away on the sunlit stream—a perfect idyll for those “good companions” the lone rider and his Ariel Motor cycle.



