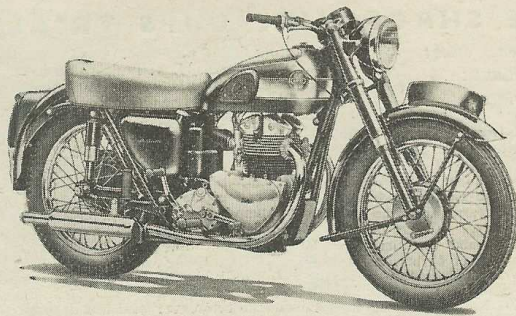
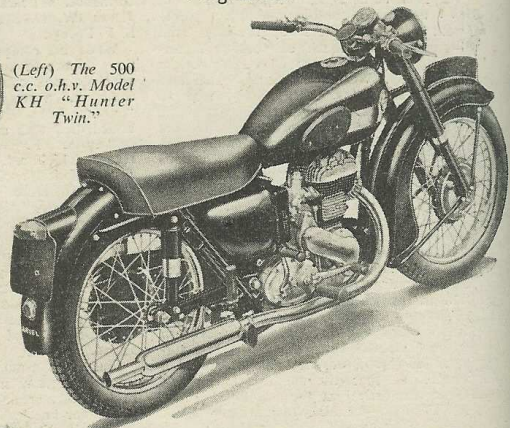


ARIELS for 1955

Selly Oak Factory Consolidate with
Detail Improvements to a Nine-model
Programme



(Left) The 500 c.c. o.h.v. Model KH "Hunter Twin."



(Right) One of the few s.v. models available to British riders—the Model VB of 600 c.c. (Below) The new tappet inspection cap on the twins and o.h.v. singles.

CATERING for widely differing requirements, Ariel Motors, Ltd., whose current nine-model programme ranges in popular capacity "steps" from the 1,000 c.c. four-cylinder class down to a 200 c.c. lightweight "single," are to carry on with these arrangements for the 1955 season rather than upset well-established production by introducing needless innovations. Last year, it will be remembered, Ariels announced their swinging-fork frame and also introduced two entirely new models, the 646 c.c. "Huntermaster Twin," with which this new frame was used, and the little 197 c.c. "Colt," a lightweight bearing a famous old Ariel name.

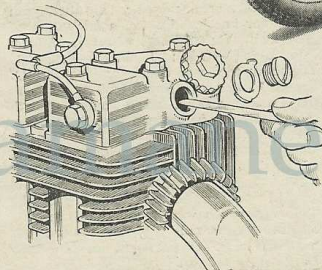
While the new frame was specified also for the 498 c.c. "Hunter Twin" and 497 c.c. and 347 c.c. "Hunter Singles," the famous "4G" 997 c.c. four-cylinder model continued to use the patent Ariel short-link rear springing, this type of frame being specified as standard also for the 598 c.c. side-valve model "VB." With these attractive wares the Ariel company have enjoyed a fine sales year; during the summer months the output, in fact, constituted an all-time record in the history of the present Ariel organization.

Nevertheless, without disturbing this production potential, the Company systematically introduced a number of modifications which further improve the second-year version of an established range. Throughout, the accent has been on comfort—and thereby safety; on better facilities for maintenance; on cleanliness in wet-weather riding conditions and on quieter engine performance. Improved wearing quality is suggested by the fitting, where their use is beneficial, of Hepworth and Grandage "Vacrom"-type top piston rings, and all 1955 Ariels except the "4G" and "Colt" are thus equipped.

Save again for the "Colt," the frame of which is different from those of the other 1955 models, the range is now equipped with a thief-proof steering-lock device. Peace of mind, therefore, is a further quality engendered by Selly Oak fashion for next year.

Only one model, the long-established "VB," has received attention calculated in any way to improve performance from a speed point of view. For this machine, a new die-cast alloy cylinder head has been evolved; it provides a compression ratio of 6 instead of 5:1 and the side-valve power unit and Burman gearbox are housed in the swinging-fork type frame. Details of the two competition models, the "HT" and "HS" are to be announced later.

That is the overall picture. A prospective



buyer looks for greater detail concerning a machine of his possible choice and it will help now to enlarge, model by model, on the previous generalities.

First, the "4G"; here is a de-luxe alloy-engined model, with a near-100 m.p.h. performance solo, which is equally satisfactory for high-speed work in combination form. All "4G" equipment, such as the high-output dynamo and coil-ignition components are to car-type standard and an S.U. carburetter is used. Nothing basic has been altered on the "4G," although the finish is now to be deep claret instead of black. This model benefits by the addition of the steering-head lock and the use of a flexible fuel pipe in place of the previous soldered tube assembly.

Of 646 c.c. and 498 c.c. respectively the "FH" and "KH," have the same finish as the "4G"; they are equipped with the safety lock and flexible fuel pipe, and they share with the "singles" a completely new Amal carburetter, which was described in this journal last week. The "KH" Twin and the singles also now feature a new inspection cap in the rocker box, enabling the owner to carry out inspection and checking of the tappets without having first to remove the rocker covers.

For the "FH," the makers claim 90-94

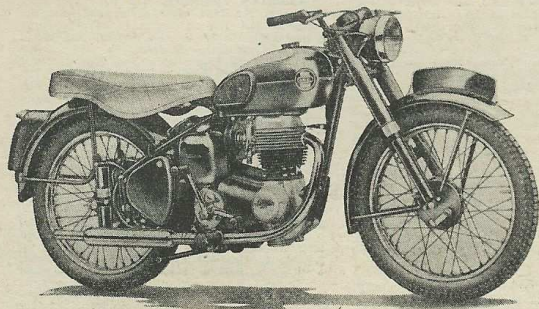
m.p.h. and 75-80 m.p.h. for the "KH." Both have cast-iron twin cylinders, a forged-steel crankshaft with the drive-side supported by a larger roller bearing and a substantial white-metal-lined plain bush on the timing side.

A cast-iron barrel and polished alloy cylinder head are used for the single-cylinder 497 c.c. "Hunter Single." The 347 c.c. version has an iron head and barrel, and the identifying letters "VH" and "NH" are used respectively. Here, again, carburation is by a much-modified Amal instrument with Lucas Magdyno ignition and lighting equipment instead of the separate magnetos and dynamos specified for the "twins." Some 75-80 m.p.h. (347 c.c.) and 80-85 m.p.h. (497 c.c.) are the maximum speeds claimed for the two "singles."

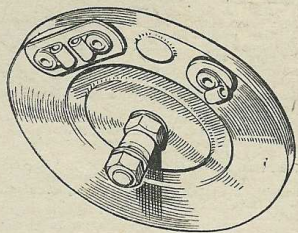
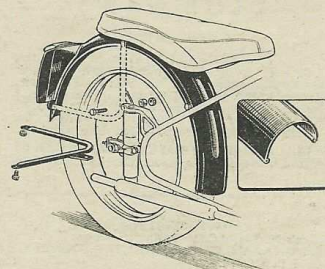
With raised compression ratio, the "VB" is said now to be capable of more than 70 m.p.h. Moreover, its whole character has changed, this model now being listed with the swinging-fork-type frame. For 1955 this frame, which is largely arc welded in construction, has been "tidied up" and provision made for a longer rear-brake lever.

With the swinging-fork "twins" and o.h.v. "singles," the model "VB" includes in its specification oil-tank arrangements in which the filler cap is located centrally, where it does not get in the rider's way, and a redesigned and longer rear mudguard affording better weather protection. All but the "Colt" are now equipped with 3.25-in. by 19-in. front tyres and, save in the case of the "4G" and "Colt," new Burgess air cleaner rubber connections are fitted to suit the angle of the Amal carburetter.

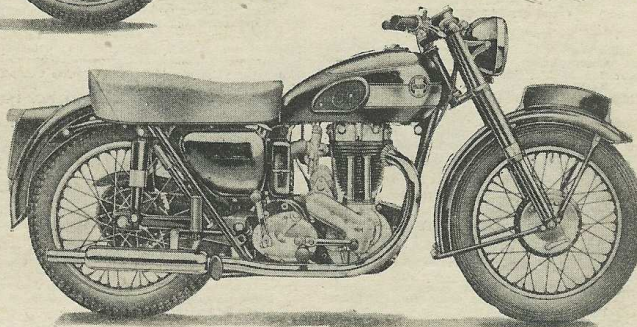
The second-season "Colt" emerges fully established as one of the two British-made under 200 c.c. four-strokes. Work carried out on the engine has resulted in the use of quietening cam ramps and therefore an altogether "carpet slipper" performance. A



(Left) Of 200 c.c., this is the o.h.v. "Colt," Model LH, "baby" of the Ariel range. On the right is the machine's quickly detachable rear mud-guard stay. (Inset) The deep section mud-guard.



The new Westinghouse rectifier on the "Colt."

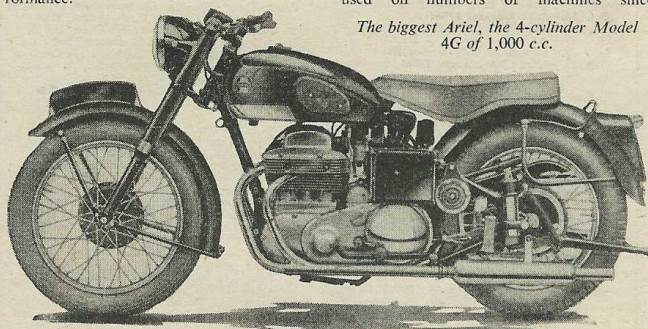


slower tappet rise taking place over some 35° of cam rotation permits wider tappet clearance and the push-rods have been increased in diameter from 1/8 in. to 5/16 in., giving greater rigidity with no loss in performance.

Claimed to give a better output, the new A.C./D.C. rectifier, fitted to the "Colt," is the latest product of the Westinghouse organization. It is a development of the familiar square-shaped "Westarlite" rectifier used on numbers of machines since

the inception of the A.C./D.C. system. Although the unit is completely sealed, the outer discs are, in fact, part of the active rectifying element and, presenting a comparatively big area to air-flow, contribute to efficient cooling. The component illustrated is of the positive-earthing type, the main centre stud being employed to deliver D.C. via the frame of the machine to the battery. The two grouped connections take the input from the A.C. generator and the single connection is for the negative cable.

The biggest Ariel, the 4-cylinder Model 4G of 1,000 c.c.



Wiring connections have been simplified and a new, compact loom in conjunction with "Wipac" alternator and Varley battery, provides practically fool-proof "electrics" — an attractive feature to the utility rider for whom the "Colt" is primarily intended.

This type of user, in particular, will appreciate the facility for quick removal of the rear wheel, should it become necessary, by simply removing the quickly-detachable side stay and swinging the spindle outwards to withdraw the wheel complete. This innovation permits the fitting of a much longer mudguard with built-in number plate and neat tail light and reflector assembly.

SPECIFICATIONS AND PRICES

Model and type	c.c.	C.R.	Approx. b.h.p.	Suspension		Gear ratios	Weight lb.	Tank gal.	Wheel-base in.	Ground clearance	Saddle height	Basic price			Total price		
				Front	Rear							£	s.	d.	£	s.	d.
LH "Colt" o.h.v.	197	7.5	10/5,600	T	P	7.0, 8.5, 11.6, 17.5 . .	270	2½	51½	5½	29½	112	0	0	134	8	0
NH "Hunter Single" o.h.v.	347	6.2	18/5,600	T	SF	5.72, 7.50, 9.72, 15.15	365	4	56	5½	31	155	0	0	186	0	0
VH "Hunter Single" o.h.v.	497	6.8	26/6,000	T	SF	4.74, 6.20, 8.05, 12.55	375	4	56	5½	31	165	0	0	198	0	0
KH "Hunter Twin" o.h.v.	498	6.8	28/6,200	T	SF	5.18, 6.77, 8.81, 13.72	390	4	56	5½	31	185	0	0	222	0	0
VB s.v.	598	6.0	18/4,400	T	SF	4.74, 6.20, 8.05, 12.55	370	4	56	5½	30	155	0	0	186	0	0
FH "Huntmaster Twin" o.h.v.	646	6.5	33/5,600	T	SF	4.35, 5.70, 7.40, 11.55	410	4	56	5½	31	192	0	0	230	8	0
4G "Square 4" o.h.v. . .	997	7.2	42/5,800	T	P	4.18, 5.46, 7.1, 11.07	435	5	56	5½	31	245	0	0	294	0	0

Alternative Specification: (Prices include P.T.) VB with rigid frame £174.