



PIXIE

ULTRA-LIGHT FIFTY

NOW IN PRODUCTION

Progress

ARIELS have a point. "Why change a winning team?" say they—and so the famous trio of two-fifty twins (Leader, Arrow and Arrow Super Sports) purrs on into the new season with just one minor change, the fitting of bigger rear number plates suitable for seven-character registrations.

But the factory's experimental department has certainly not been idle this past year, for there is big news of the little 'un—the overhead-valve Pixie fifty. The development programme, which included the mountain-bashing session by a team of apprentices mentioned last week, was a saga in itself; but now, with the bugs well and truly shaken out, the Pixie is in full-scale production.

For the obvious production advantages, the 49.9 cc, four-speed engine unit is akin to that of the 75 cc B.S.A. Beagle. But the two machines are aimed at very different markets and the Pixie emerges as an ultra-light runabout having strong family ties with the larger Ariels.

Wheels of 15in diameter and a seat height of only 26½in, lend compactness to the design. Strength comes from the immensely rigid, box-like, pressed-steel frame (within which is housed the fuel tank).

Precision handling is promised by the trailing-link front fork—a feature found on all Ariel models.

Suspended from the frame beam, the little overhead-valve

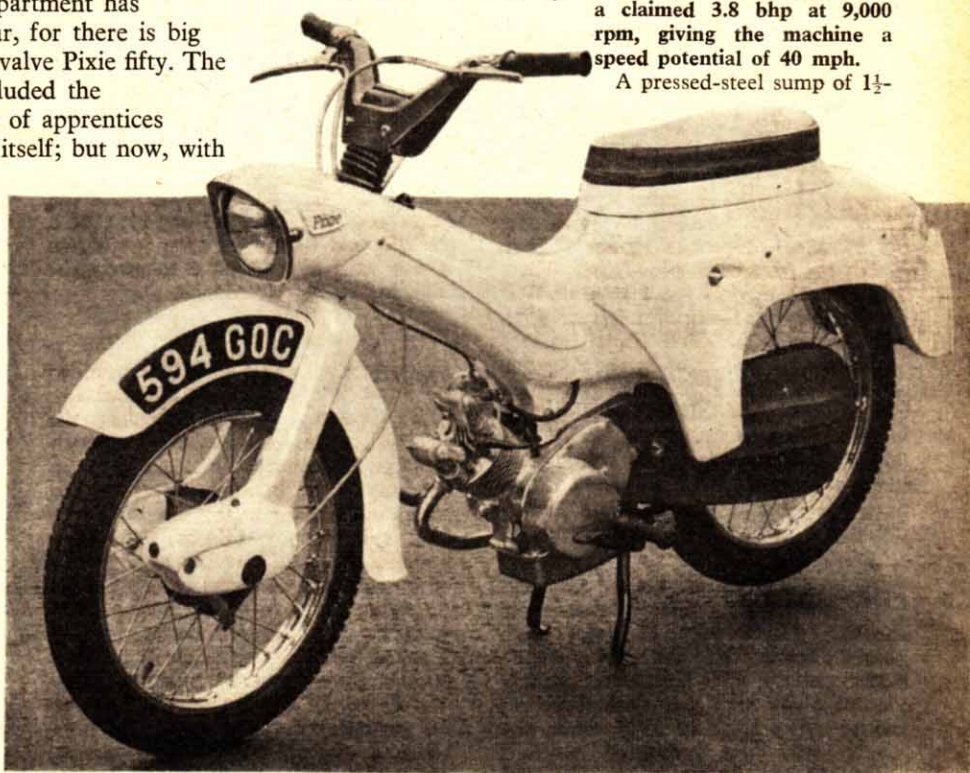
engine has a number of technically interesting features, notably in the crankshaft layout. The shaft is carried in three ball bearings. Two of them are at the drive side, with the driving pinion (primary drive is by gear) sandwiched between them; at the left-hand end of the shaft, be-

yond the outer main bearing, is a 21-watt Wico-Pacy fly-wheel generator with lighting coils.

Drive from the engine-shaft gear is taken by teeth formed on the circumference of the clutch driving plates.

With a compression ratio of 8.8 to 1, the engine develops a claimed 3.8 bhp at 9,000 rpm, giving the machine a speed potential of 40 mph.

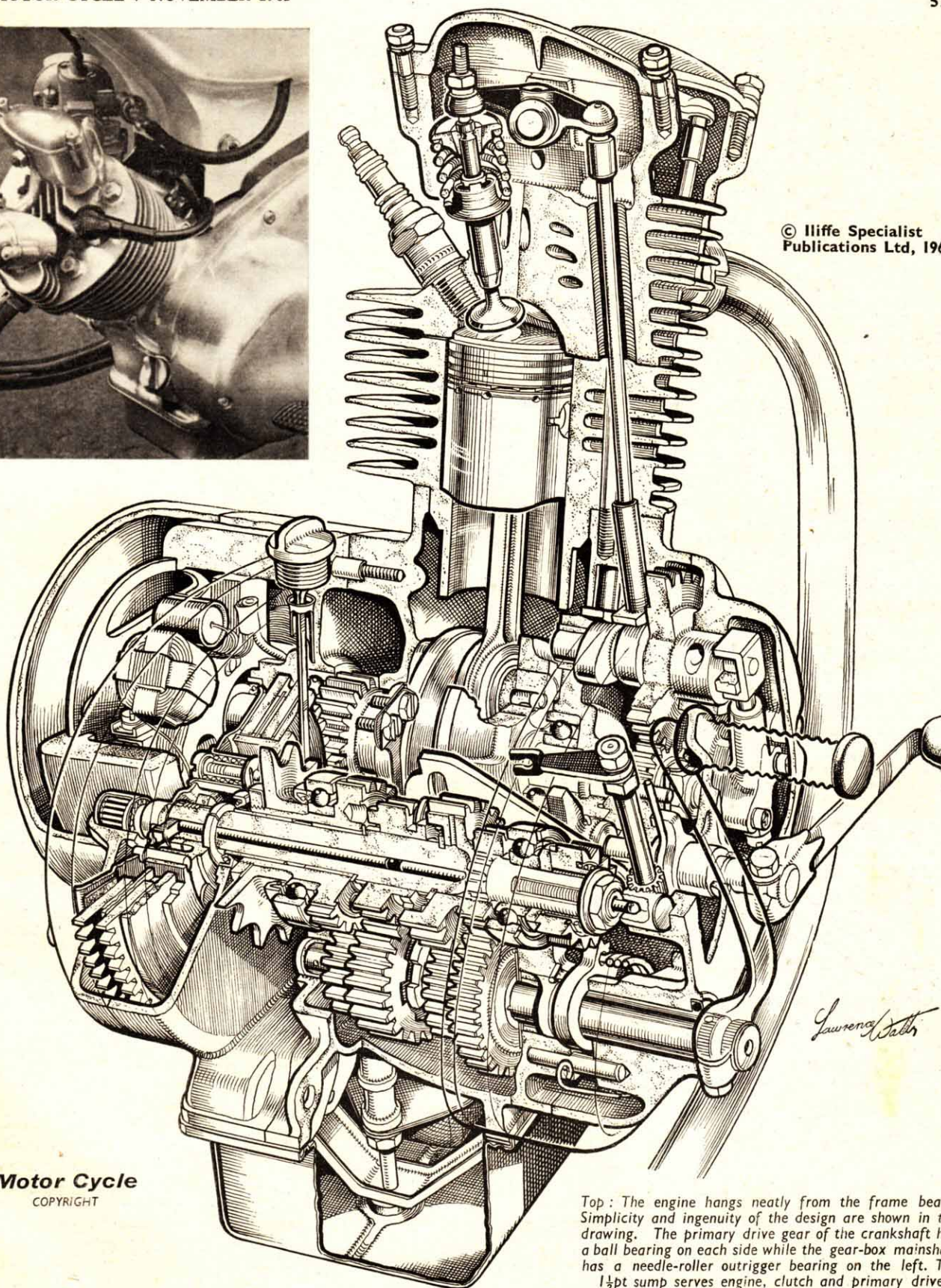
A pressed-steel sump of 1½-



Top: Precision handling demonstrated. Above: "Anyone can ride me," the Pixie seems to say



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Top: The engine hangs neatly from the frame beam. Simplicity and ingenuity of the design are shown in the drawing. The primary drive gear of the crankshaft has a ball bearing on each side while the gear-box mainshaft has a needle-roller outrigger bearing on the left. The $1\frac{1}{2}$ pt sump serves engine, clutch and primary drive

pint capacity carries the engine oil, and the wet-sump lubrication system is operated by a single-plunger pump.

Recommended oil grade is SAE20, incidentally, since the engine, clutch and primary drive have a common oil supply.

Operation of the four-speed gear box is by quadrant and double-plunger mechanism. Final drive is by chain, protected by a very deep guard.

Rubber in compression provides the suspension medium at both front and rear. Nylon bushes are employed at the rear-fork pivot, front-fork link pivots and brake cross-shaft bearings; these are grease-packed on assembly and should need no attention during the life of the model.

Adjustable for height, the handlebar assembly is a steel pressing with a mounting for the speedometer—not a legal necessity on a machine of such small size, but normally fitted (at £3 3s extra cost) unless the customer specifies otherwise.

TWO-TONE

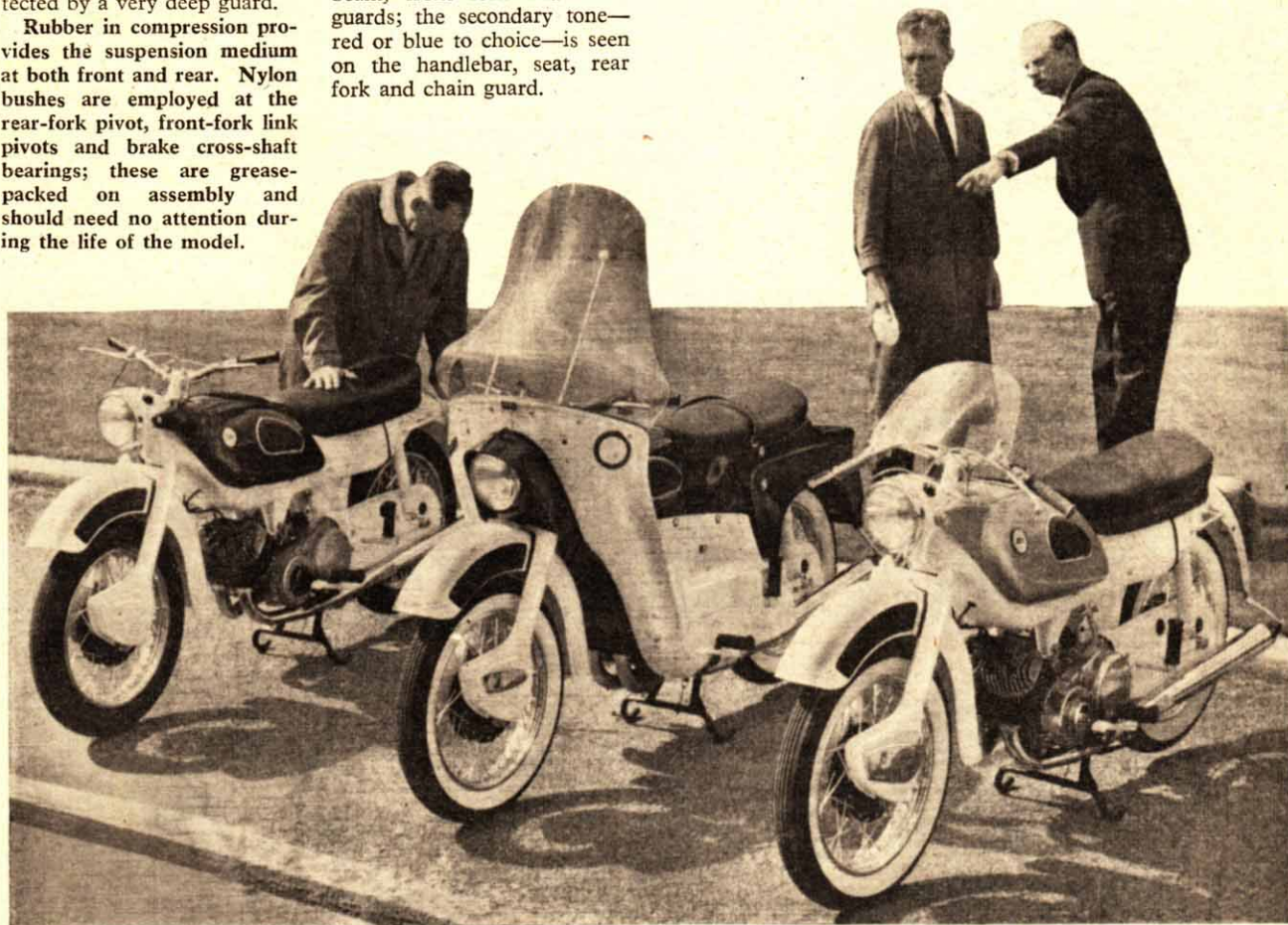
Main colour of the Pixie is ivory, applied to the frame beam, front fork and mudguards; the secondary tone—red or blue to choice—is seen on the handlebar, seat, rear fork and chain guard.

Few readers should need much introduction to the remaining Ariels, for the Leader, Arrow and "Golden Arrow" can count their devotees by the thousand. All are 247 cc two-stroke twins based on a well-tried theme. They differ mainly in degree of luxury.

Design departs from the conventional in the massive, box-section frame beam (embracing the fuel tank), with

front suspension by hydraulically damped, trailing-link fork.

Major model is the Leader, now entering its sixth year of production. Designed to provide maximum weather protection, the Leader offers complete engine enclosure and built-in legshields and windscreen, while there is parcel accommodation within the upper bodywork.



A winning team. Left to right: The Arrow, Leader and Arrow Super Sports two-fifty twin two-strokes

ARIEL	CAPACITY, BORE, STROKE AND TYPE OF ENGINE	CR	IGNITION	GEAR RATIOS				CAPA- CITY		SUSP		SIZE OF TYRES		Wt lb	PRICE WITH TAX		
				BOTTOM	SECOND	THIRD	TOP	FUEL	OIL	FRONT	REAR	FRONT	REAR		£	s	d
PIXIE ...	49.9 cc (38.9×42mm) ohv	8.8	M	30.3	23	14.8	11.2	1½g	1½pt	TL	PF	2.50×15	2.50×15	120	81	18	0
ARROW	247 cc (54×54mm) ts twin	10	—	19	11	7.8	5.9	3g	—	TL	PF	3.25×16	3.25×16	285	192	0	0
ARROW SUPER SPORTS	247 cc (54×54mm) ts twin	10	—	19	11	7.8	5.9	3g	—	TL	PF	3.25×16	3.25×16	285	206	8	0
LEADER	247 cc (54×54mm) ts twin	10	C	19	11	7.8	5.9	3g	—	TL	PF	3.25×16	3.25×16	310	219	12	0

MANUFACTURERS: Ariel Motors, Ltd, Armoury Road, Small Heath, Birmingham, 11.

EXTRAS: For Pixie: Speedometer, £3 3s; windscreen, £4 10s; legshields, £4 4s; panniers, £6 6s; rear carrier, £1 15s; front basket, £1 15s. For Arrow and Arrow ss: Carrier, £1 15s; front stand, 13s 2d; seat strap, 6s 7d. For Leader: Direction indicators, £7 8s 10d; clock, £5 8s; panniers, £9 15s; rear bumper, £1 16s.

ABBREVIATIONS: CR, compression ratio; M, magneto; C, coil; TL, trailing-link fork; PF, pivoted fork. Tyre sizes are in inches.



A rubber block takes road shocks at the rear. The fork is pivoted on grease-packed nylon bushes

On the Arrow, the upper presswork is smaller, and weather shielding is discarded. Third variant is the Arrow Super Sports. This follows Arrow specification except that the finish is more glamorous, incorporating chromium-plated right-hand engine cover, front-fork spats and tool-box lid; in addition, power output is boosted to 20 bhp at 6,650 rpm by the use of a larger-bore carburettor.

On all three models the basic colour is ivory, with golden "tank" and number plate surround for the Super Sports, and upperworks of the standard Arrow in black or Cherokee red.

For the Leader, the body pressing (including the tail assembly) and headlamp shroud may be in red, blue, black or seal grey to choice.



ON THE ROUGH

BY PETER FRASER

INVASION

REMEMBRANCE Sunday is this weekend and in accordance with custom there will be no events in Britain that day. No fewer than 48 British riders will, however, be crossing the Channel to ride in the French St Cucufa Trial.

The contingent includes Sammy Miller, Don Smith, Jim Sandiford, Roy Peplow, Scott Ellis, Peter Fletcher, the Adsett brothers and several other top-notchers.

In addition, what is, I think, the largest number yet of private owners have entered.

Probably that total of 48 is the best British support any French mudplug has ever received.

The trial is on the outskirts of Paris and competitors will cover the 30-mile, 15-section lap twice.

Besides the British riders and, of course, the French, there will be stars from Belgium, West Germany, Switzerland, Spain, France, Holland and, possibly, Czechoslovakia. In all there are 90 riders in the Expert category.

Across the water in another direction, Irish trials types can have a ride on Saturday in the Turner Trial. Start is at 2 pm at the Lead Mines, Conlig, County Down, well known as the Hurst Cup venue.

That Double

HAVING BEEN a competitor on previous occasions in both the Hoad and Perce Simon trials, I am only too well aware what gruelling events they can be after a drop of rain.

To win both in the same weekend with scores of 30 and 42 respectively is really something. Greeves-mounted Tony Davis is certainly an impressive performer these days.

Off the Beat

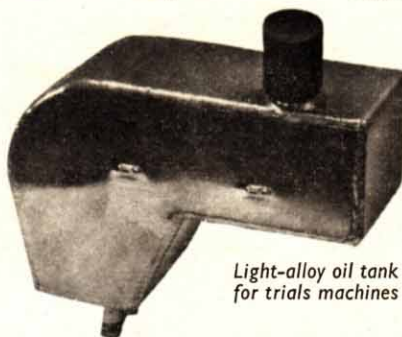
IT WARMS the heart to see collective enthusiasm recognized. This was the theme last Friday when Edward Turner, managing director of Triumphs, presented the Metropolitan Police with a fine trophy to mark an outstanding season of competition successes.

Neat Oil Tank

COMERFORDS are marketing a neat oil tank primarily for AMC trials models, but it could be used for other makes with a similar engine-gear box layout.

The tank, which sits on top of the gear box between the engine plates, is made of light alloy and retained by elastics.

It holds about three pints and weighs just 18 ounces complete with the rubber cap on the filler neck. Dimensions are: length, 8in; width, 3½in; depth at front, 5½in; at rear, 3in. Price of the tank is £2 2s 6d from Comerfords, Ltd, Portsmouth Road, Thames Ditton, Surrey.



Light-alloy oil tank for trials machines

During the past three years Met Police entries have been boosted in a variety of events—the Scottish, the Welsh Three-Day, the Services trials, and the Liège Rally, for example, and Triumphs, whose association with the force goes back more than 25 years, decided to give a bit more impetus with the trophy.

There was something for the most successful riders, too. Derek Campy, Len Farmer, Bomber Harris, Alec Smith and Bob Wheeler received plaques.

Getting In

SHORT of four qualifying points for the British Experts' Trial, Roy Peplow's gamble on his five-hundred Triumph twin has paid off. Narrowly missing the premier in the Hoad, he had nevertheless secured himself a ride in this exclusive event with the ten points he collected.

Another man on tenterhooks was AJS teamster Gordon Blakeway. He started in the Perce Simon needing three more points. His fifth place notches him four so he is in, too.

Easy

SCOTT TRIAL footnote. There must be many occasions on which competitors in that gruesome struggle have remarked that after completing that course anything would seem easy by comparison.

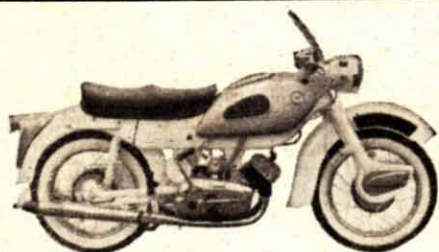
At least seven riders would agree with this statement at the moment. David Clegg, Gordon McLaughlan, Gordon Adsett, Sam Cooper, Dave Rowland, Peter Whelan and Alan Lampkin all returned home after this year's Scott and collected premier awards on the following day!

Watch It

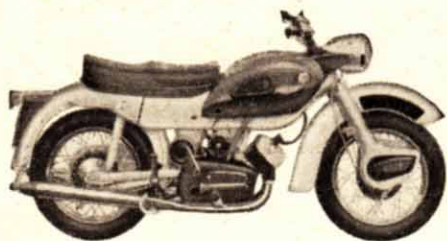
A WORD for rough-stuff enthusiasts down in the West Country. The Devon County Council has set up what is officially described as "a working party on motor vehicles in the Dartmoor National Park."

And you can guess what that means! Just in case you don't, this working party is negotiating with landowners to "prevent the unauthorized use of certain unmade tracks which are not classified as county highways."

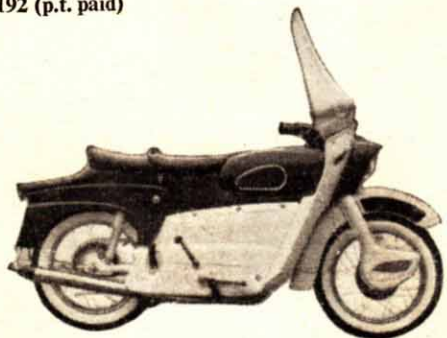
'the 1964 Ariels have had five years of testing!'



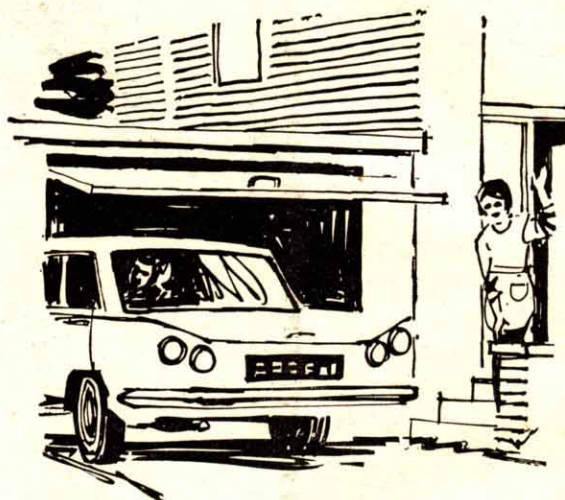
ARROW SUPER SPORTS—extra power, with looks to match. £206.8.0 (p.t. paid)



ARROW—same superb engineering, unbeatable value. £192 (p.t. paid)



LEADER—with luxurious weather protection and a host of 'extras' as standard. £219.12.0 (p.t. paid)



'Five years?' 'That's right'

For the 1964 Ariel design is the same that has been bought and ridden by thousands of delighted users for the last five years.

This means that every single new Ariel has five years' proof of excellence behind it. The Ariel design is *so advanced* that, after years of use, years of reports on every aspect of performance, the design is still years ahead!

When a design is unchallengeably *right*, why change it?

Every 1964 Leader, Arrow and Arrow Super Sports has the robust 247 c.c. twin-cylinder two-stroke engine . . . the unique rigid steel chassis which will carry 1964's riders, reliably and sturdily, as it has before. All the other excellent features are there, too—proved by years of experience.

what's new
 ??? the
ARIEL
Pixie
 a mini-motorcycle



£81-18-0

And just about everything is new about the 50 c.c. ARIEL 'PIXIE.' Here it is—all set for a career as successful as its three 'five-year tested' stable-mates. A mini-motorcycle designed for today and tomorrow.

In brief, the 'PIXIE' is a 50 c.c. over-head valve model, with a uniquely attractive pressed steel 'chassis,' 4-speed gearbox, powerful brakes and first-class suspension . . . and all for only £81.18.0 (p.t. paid).

To: ARIEL MOTORS LTD., Armoury Road, Birmingham 11

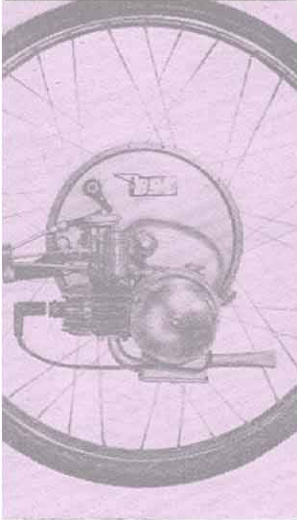
Please send your catalogue and details of special money-saving 'Clearway' insurance rates available to Ariel owners.

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