

get together with an

ARIEL



introduction

The bold decision of this Company to concentrate on one basic design has proved highly successful. Six years of development and three Seasons of very successful trading have given us confidence to offer the continuance of a basically unchanged range for the 1962 Season.

These three exceptional models are all fitted with the well tried engine, over 25,000 of which are already in service. They cater for every need from the owner demanding full weather protection, to the sporting rider requiring exceptional performance coupled with road holding, reliability, braking and economy. During the past year our technicians have incorporated further technical improvements and our designers have evolved new, glamorous and striking colour schemes. This catalogue gives complete details of a revolutionary design which we believe puts our machines years ahead of our contemporaries. The growing demand is a glowing testimony to the outstanding reliability and performance of these machines.

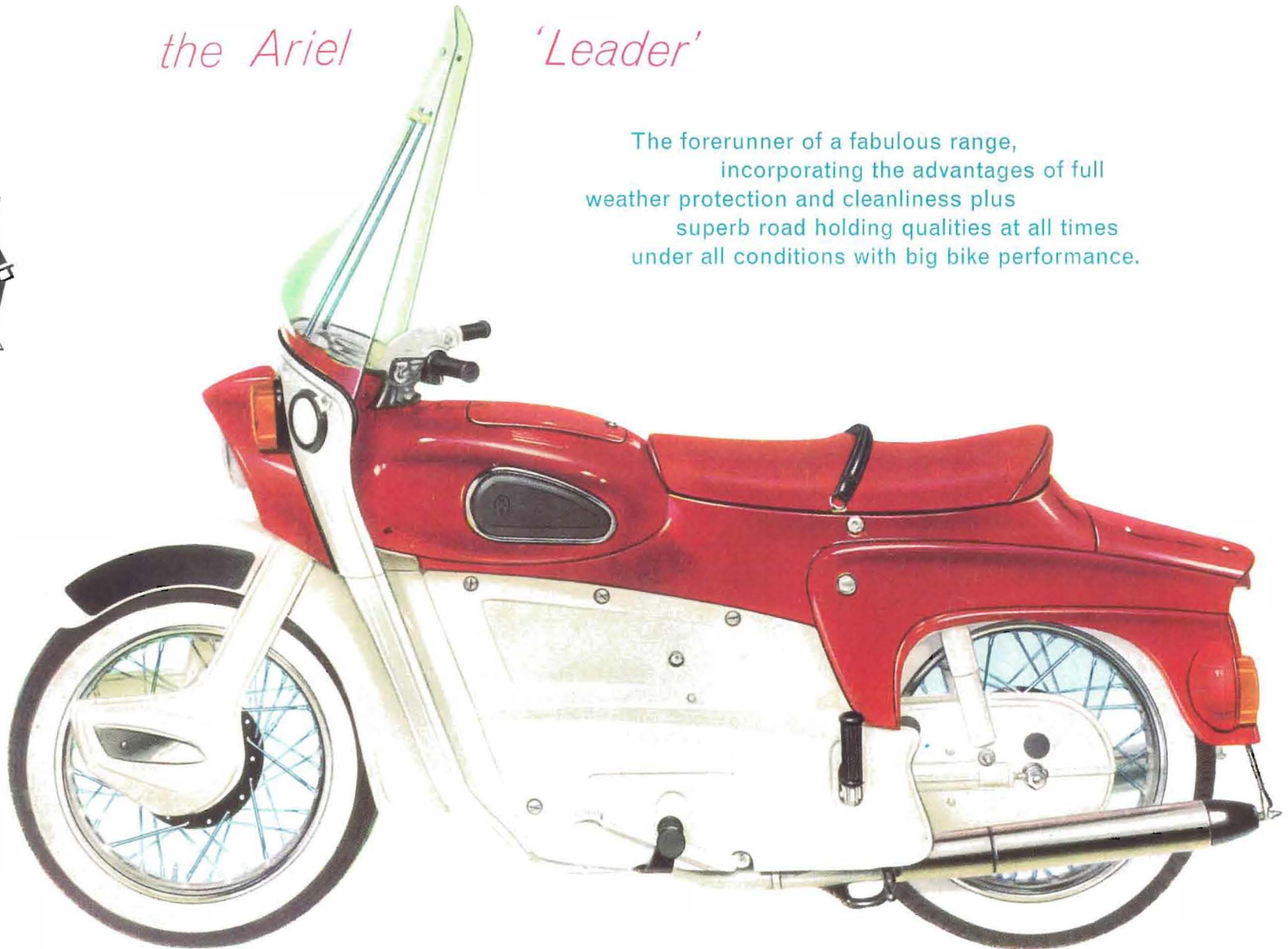
If there are any details which are not clear please let us know.



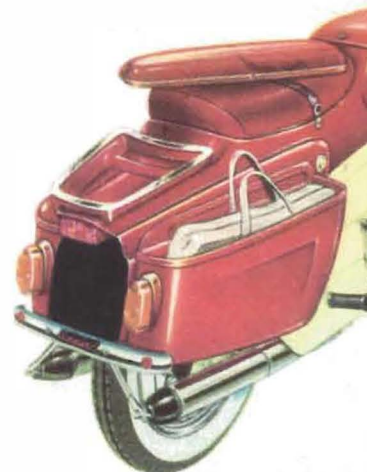
the Ariel

'Leader'

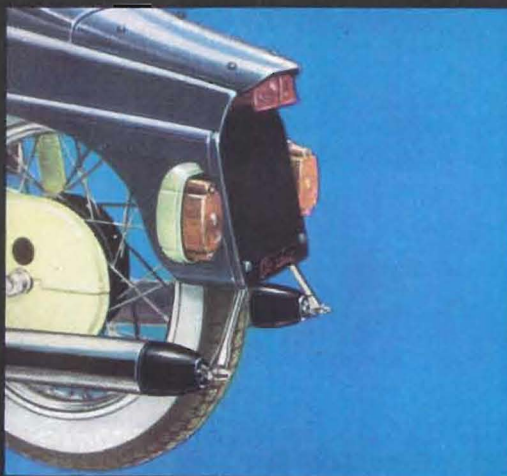
The forerunner of a fabulous range,
incorporating the advantages of full
weather protection and cleanliness plus
superb road holding qualities at all times
under all conditions with big bike performance.



Rear flashers can be supplied without pannier equipment if desired.



Metal panniers, plastic holdalls rear flashers and rear fender.



Instrument panel and parcel locker.

The petrol tank filler cap, battery, tyre inflator and tool kit are neatly arranged under the dual seat, which can be locked in the closed position.



special 'Leader' features



'Leader' GENERAL SPECIFICATION

ENGINE

Robust 247 c.c. (15 cu. in.) twin cylinder two-stroke of ARIEL design and manufacture, operating on the loop scavenging principle; has separate ported cast-iron cylinder and alloy heads, with deep directional finning arranged for maximum cooling, each pair secured to the crankcase by four studs and high tensile steel sleeve nuts; built-up crankshaft of exceptional rigidity mounted on three heavy duty ball bearings; there is a taper and key coupling in the middle of the shaft, secured by a bolt, which is easily accessible through the hollow mainshaft for easy servicing; the crankcase pressure is held by four self-adjusting rubber oil seals; the crankcase-gearbox unit is of light alloy; the Lucas R.M.18.55 watt A.C. generator, spigot mounted on the offside of the crankcase, with an adjustable twin contact breaker assembly on the nearside; the primary drive is by $\frac{3}{8}$ " pitch endless chain fitted with a rubber covered spring steel adjuster for silent running; it has external adjustment; each big end has a double row roller bearing; the $\frac{7}{8}$ " bore Amal Monobloc carburettor has a cold starting device, and lubrication is by petroil system.

GEARBOX AND TRANSMISSION

Four-speed with foot control; the ARIEL patented clutch incorporates a rubber cush drive and is of the three plate wet type; the $\frac{1}{2}$ " pitch rear chain is totally enclosed and automatically lubricated from the primary chaincase.

FRAME AND FITTINGS

Engine is secured to underslung extensions of the well proved frame of unique design by three long bolts; the lower high tensile bolt also carries the swinging arm of the rear suspension, which is pivoted on rubber bushes. By unscrewing these three bolts the engine/gearbox unit, with rear wheel and chaincase, can be withdrawn. The box type rear frame extension forms an air intake silencer, having the carburettor connection at the front and a large efficient air filter with easily replaceable element on the offside.

FRONT FORKS

These are of the ARIEL patented trailing link type, with long coil suspension springs supporting two way hydraulic dampers that are contained within the two large diameter stanchion tubes; the link motion gives a constant wheelbase, the action eliminating uneven tyre wear; all swivelling points have anti-friction nylon bushes.

FULL WIDTH HUBS

The hubs are fitted with heavy duty ball bearings; the wheels are quickly detachable; the brakes are 6" diameter and are genuine full width with a total effective brake area of 24 $\frac{1}{2}$ square inches. Water excluders are incorporated on brake anchor plate.

MUDGUARDS

The front guard has a deep valance with concealed fixing to the fork stanchion tubes, and an anti-splash channel is formed round the inside edges, there is a small concealed rear guard to supplement the hinged tail member.

TAILMEMBER

Carries rear number plate, stop tail lamp and reflector, and hinges upwards for easy removal of rear wheel. Provision is made for the easy fitment of ARIEL rear carrier and panniers (see special features). When fitted these also move with the tail member.

STANDARD EQUIPMENT

Easy lift central stand; retractable lifting handle; trip speedometer; ammeter; combined key ignition and emergency start switch; lighting switch; heavy duty 13 amp. hour 6 volt Lucas lightweight battery; A.C. generator and rectifier; 6" diameter pre-focus headlamp with double filament and pilot bulb; high frequency electric horn; folding pillion footrests, licence holder; knee grips; complete set of tools and tyre inflator.

FINISH

The machine has a remarkably fine finish in best quality stoving enamel with a choice of four colour combinations; Cherokee Red and Ivory, Oriental Blue and Ivory, Seal Grey and Ivory and Black and Ivory. Wheel rims, silencers, levers and other decorative trim are heavily chromium-plated.

OPTIONAL EXTRAS (see separate price list)

Parking lamp and switch; inspection lamp, carrier with two straps, prop stand, detachable front stand, pannier cases, pannier bags, ARIEL styled suitcase, neutral gear indicator, flashing indicator set, eight-day clock, dual seat, waterproof cover, mirrors, windscreen extension, rear fender with reflectors, supplementary heavy weight rear springs.





the Ariel 'Arrow'

Developed from the Leader a machine
specially designed with the enthusiast
and clubman in mind; people who
insist on all round economy with
consistent reliability.

'Arrow' GENERAL SPECIFICATION

ENGINE

Robust 247 c.c. (15 cu. in.) twin cylinder two-stroke of ARIEL design and manufacture, operating on the loop scavenging principle; has separate ported cast-iron cylinder and alloy heads, with deep directional finning arranged for maximum cooling, each pair secured to the crankcase by four studs and high tensile steel sleeve nuts; built up crankshaft of exceptional rigidity mounted on three heavy duty ball bearings; there is a taper and key coupling in the middle of the shaft, secured by a bolt, which is easily accessible through the hollow mainshaft for easy servicing; the crankcase pressure is held by four self-adjusting rubber oil seals; the crankcase-gearbox unit is of light alloy; the Lucas R.M.18.55 watt A.C. Generator, spigot mounted on the offside of the crankcase, with an adjustable twin contact breaker assembly on the nearside; the primary drive is by $\frac{3}{8}$ " pitch endless chain fitted with a rubber covered spring steel adjuster for silent running; it has external adjustment; each big end has a double row roller bearing; the $\frac{7}{8}$ " bore Amal Monobloc carburettor has a cold starting device, and lubrication is by petrol system.

GEARBOX AND TRANSMISSION

Four-speed with foot control; the ARIEL patented clutch incorporates a rubber cush drive and is of the three plate wet type; the $\frac{1}{2}$ " pitch rear chain is totally enclosed and automatically lubricated from the primary chaincase.

FRAME AND FITTINGS

Engine is secured to underslung extensions of the well proved frame of unique design by three long bolts; the lower high tensile bolt also carries the swinging arm of the rear suspension, which is pivoted on rubber bushes. By unscrewing these three bolts the engine/gearbox unit, with rear wheel and chain case, can be withdrawn. The box type rear frame extension forms an air intake silencer, having the carburettor connection at the front and a large efficient air filter with easily replaceable element on the offside.

FRONT FORKS

These are of the ARIEL patented trailing link type, with long coil suspension springs supporting two way hydraulic dampers that are contained within the two large diameter stanchion tubes; the link motion gives a constant wheelbase, the action eliminating uneven tyre wear; all swivelling points have anti-friction nylon bushes.

FULL WIDTH HUBS

The hubs are fitted with heavy duty ball bearings; the wheels are quickly detachable; the brakes are 6" diameter and are genuine full width with a total effective brake area of $24\frac{1}{2}$ square inches. Water excluders are incorporated on brake anchor plate.

MUDGUARDS

The front guard has a deep valance with concealed fixing to the fork stanchion tubes. The rear tail section forms the rear guard; this is also of deep section.

STANDARD EQUIPMENT

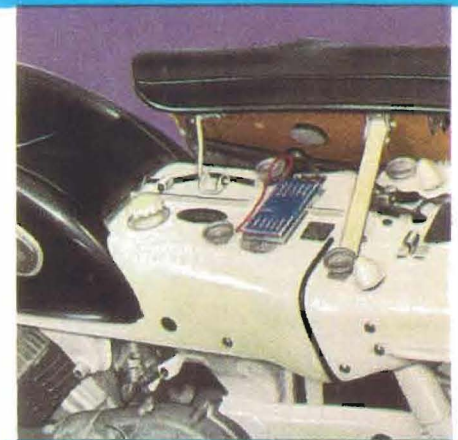
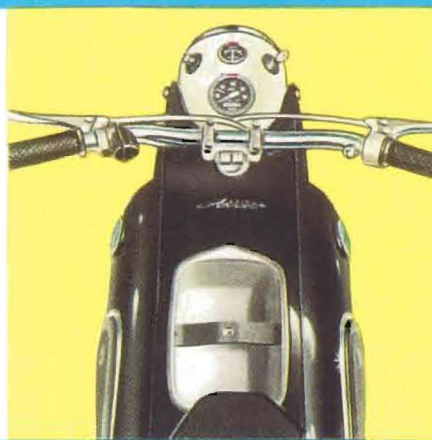
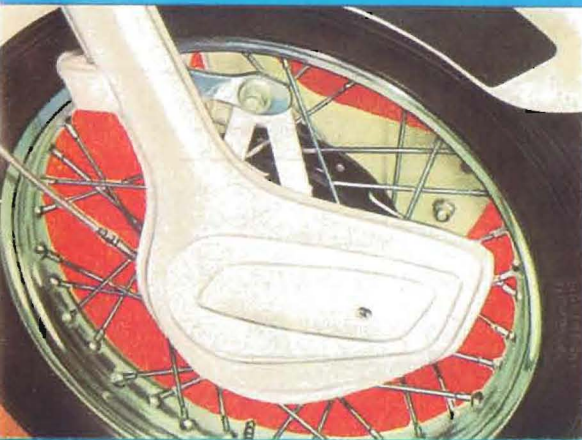
Easy lift central stand; 100 m.p.h. speedometer; ammeter; combined key ignition and emergency start switch; lighting switch; lightweight 13 amp. hour 6 volt Lucas heavy duty battery; A.C. generator and rectifier; 6" diameter pre-focus headlamp with double filament and pilot bulb, electric horn, folding pillion footrests, licence holder, knee grips, set of tools and inflater.

FINISH

The machine has a super fine finish in best quality stove enamel. Colour: two-tone Black and Ivory. Wheel rims, silencers, levers and other decorative trim are heavily chromium-plated.

OPTIONAL EXTRAS (see separate price list)

Prop stand, detachable front stand, carrier (press steel) ARIEL styled suitcase, dualseat waterproof cover, whitewall tyres, supplementary heavy weight rear springs, reserve type petrol tap, windscreen.

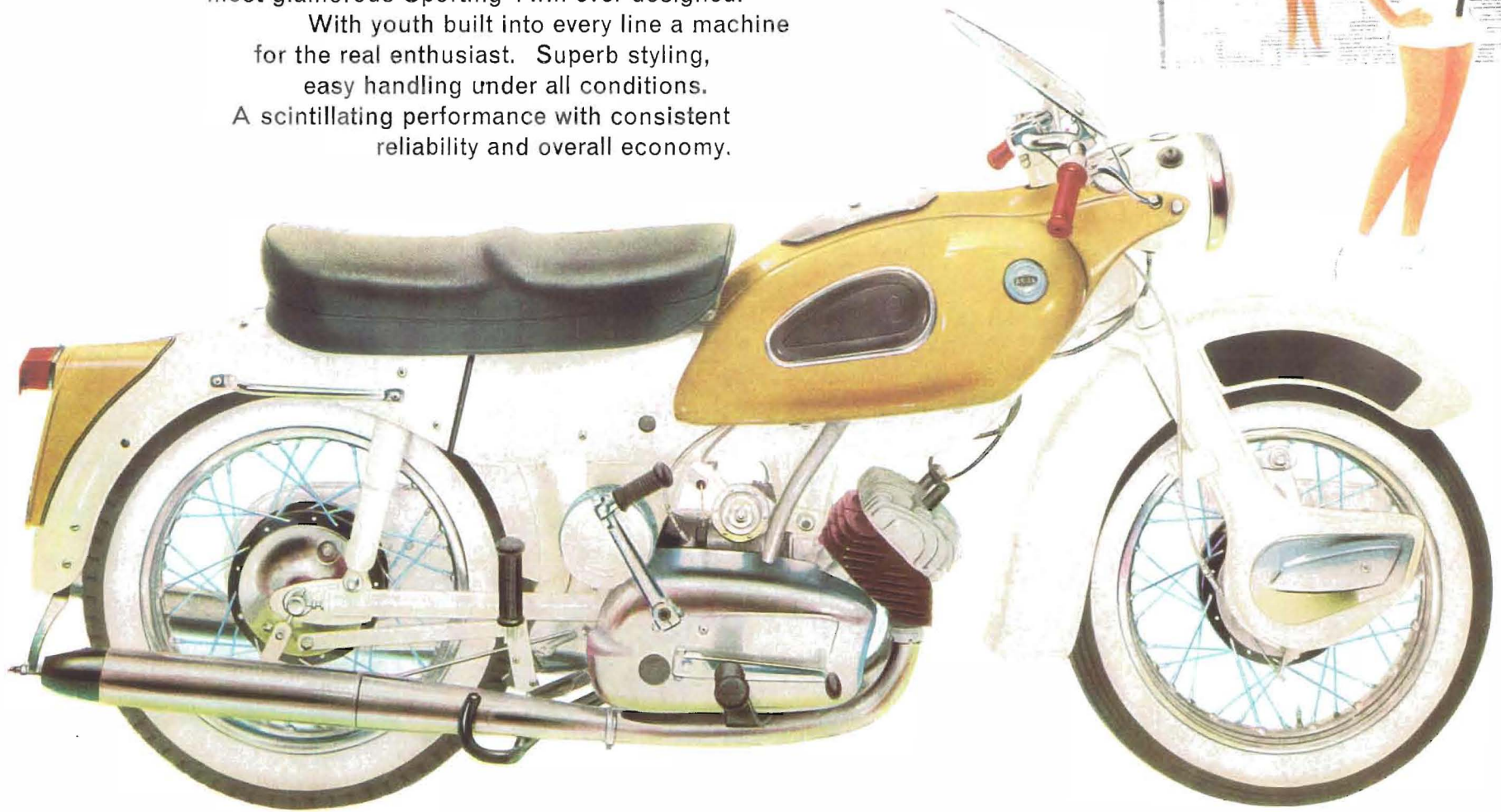


special 'Arrow' features

the Ariel 'Arrow Super Sports'

The latest addition to the range, the most glamorous Sporting Twin ever designed.

With youth built into every line a machine for the real enthusiast. Superb styling, easy handling under all conditions. A scintillating performance with consistent reliability and overall economy.



'Arrow Super Sports' GENERAL SPECIFICATION

ENGINE. Robust 247 c.c. (15 cu. in.) twin cylinder two stroke of ARIEL design and manufacture, operating on the loop scavenging principle; has separate ported cast-iron cylinder and alloy heads, with deep directional finning arranged for maximum cooling, each pair secured to the crankcase by four studs and high tensile steel sleeve nuts; built up crankshaft of exceptional rigidity mounted on three heavy duty ball bearings; there is a taper and key coupling in the middle of the shaft, secured by a bolt, which is easily accessible through the hollow mainshaft for easy servicing; the crankcase pressure is held by four self adjusting rubber oil seals; the crankcase-gearbox unit is of light alloy; the Lucas R.M.18.55 watt A.C. Generator, spigot mounted on the offside of the crankcase, with an adjustable twin contact breaker assembly on the nearside; the primary drive is by $\frac{1}{2}$ in. pitch endless chain fitted with a rubber covered spring steel adjuster for silent running; it has external adjustment; each big end has a double row roller bearing; the $1\frac{1}{2}$ in. bore Amal Monobloc carburettor has a cold starting device, and lubrication is by petrol system.

GEARBOX AND TRANSMISSION. Four-speed with foot control, the ARIEL patented clutch incorporates a rubber cush drive and is of the three plate wet type; the $\frac{1}{2}$ in. pitch rear chain is totally enclosed and automatically lubricated from the primary chaincase.

FRAME AND FITTINGS. Engine is secured to underslung extensions of the well-proved frame of unique design by three long bolts; the lower high tensile bolt also carries the swinging arm of the rear suspension, which is pivoted on rubber bushes. By unscrewing these three bolts the engine/gearbox unit, with rear wheel and chaincase, can be withdrawn. The box type rear frame extension forms an air intake silencer, having the carburettor connection at the front and a large efficient air filter with easily replaceable element on the offside.

FRONT FORKS. These are of the ARIEL patented trailing link type, with long coil suspension springs supporting two-way hydraulic dampers that are contained within the two large diameter stanchion tubes; the link motion gives a constant wheelbase, the action eliminating uneven tyre wear; all swivelling points have anti-friction nylon bushes.

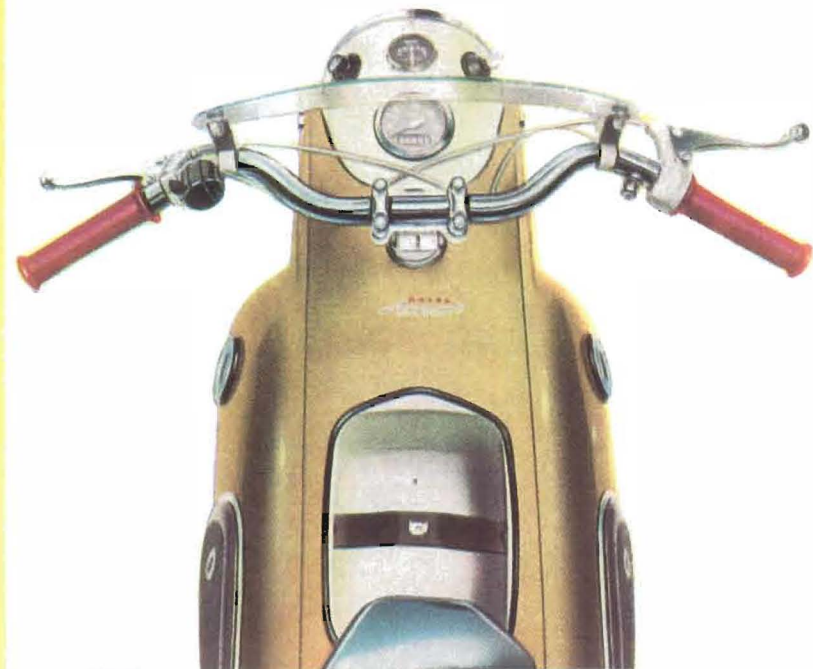
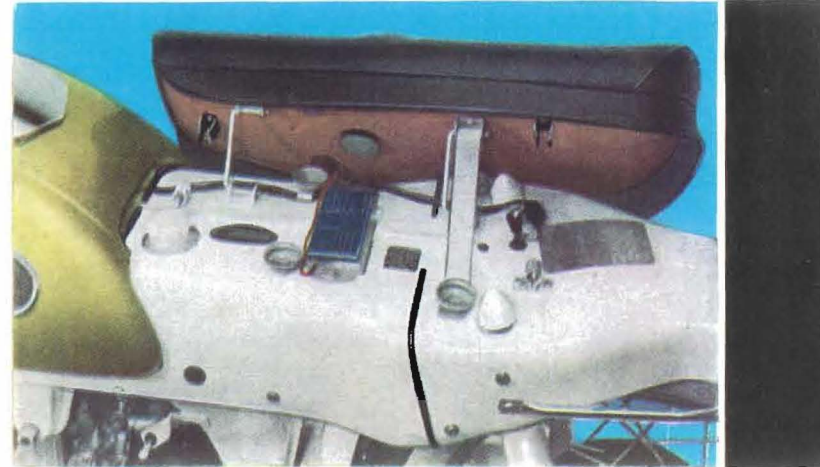
FULL WIDTH HUBS. The hubs are fitted with heavy duty ball bearings; the wheels are quickly detachable; the brakes are 6 in. diameter and are genuine full width with a total effective brake area of $24\frac{1}{2}$ sq. in. Water excluders are incorporated on brake anchor plate.

MUDGUARDS. The front guard has a deep valance with concealed fixing to the fork stanchion tubes. The rear tail section forms the rear guard; this is also of deep section.

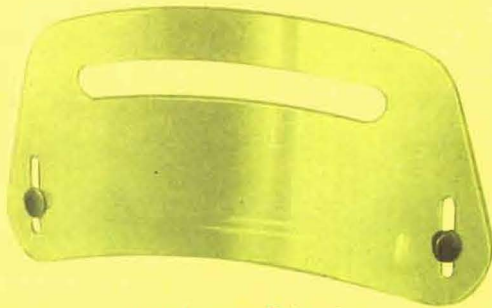
STANDARD EQUIPMENT. Easy lift central stand; prop stand; 100 m.p.h. speedometer; ammeter; combined key ignition and emergency start switch; lighting switch; lightweight 13 amp. hour 6 volt Lucas heavy duty battery; A.C. Generator and rectifier; 6 in. diameter pre-focus headlamp with double filament and pilot bulb, high frequency electric horn, folding pillion footrests, folding kickstarter; Special sports pattern handlebars with sports windscreen and ball ended control levers; reserve type petrol tap, licence holder, knee grips; set of tools and inflator.

FINISH. The machine has a super fine finish in best quality stove enamel. Colour two tone Gold and Ivory. Engine cover, fork cover plate, toolbox lid, lifting handles, wheel rims, silencers, levers and other decorative trim are heavily chromed. The alloy chaincase of this model is highly polished.

OPTIONAL EXTRAS (see separate Price List). Detachable front stand; carrier (pressed steel); ARIEL styled suitcase; dualseat waterproof cover; dualseat strap; supplementary heavy weight rear springs.

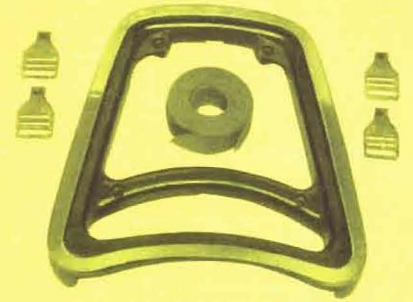
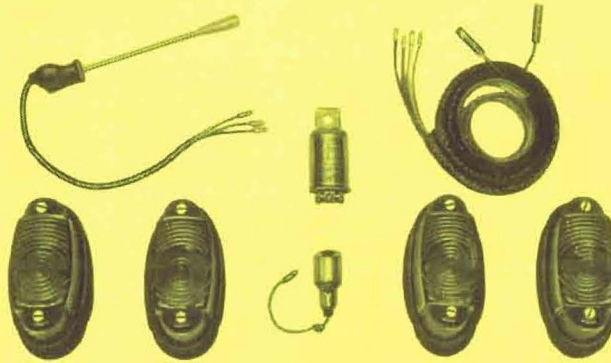


'Leader'



Windscreen Extension

Flasher Unit and Harness



Carrier with Two Straps

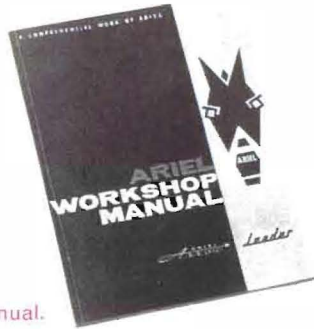


Eight-Day Clock

All Models



Front Stand



Workshop Manual.



Hand Case.



Dualseat Waterproof Cover



Supplementary Rear Springs.

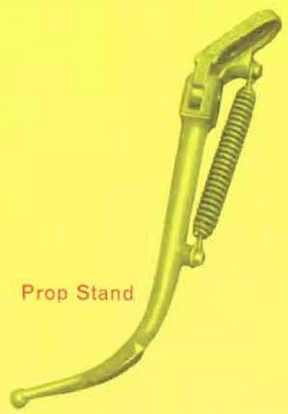
Optional Extras



Offside and Nearside Mirrors as fitted to Front Shield



Rear Fender with Reflectors



Prop Stand



Pannier cases and Pannier Bags

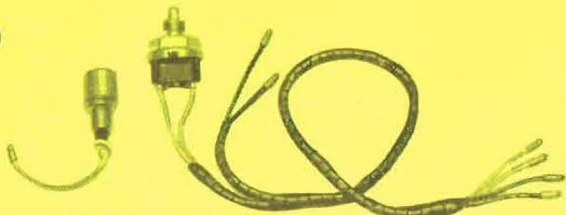
Inspection Lamp



Parking Lamp and Switch



Neutral Gear Indicator Switch & Lamp



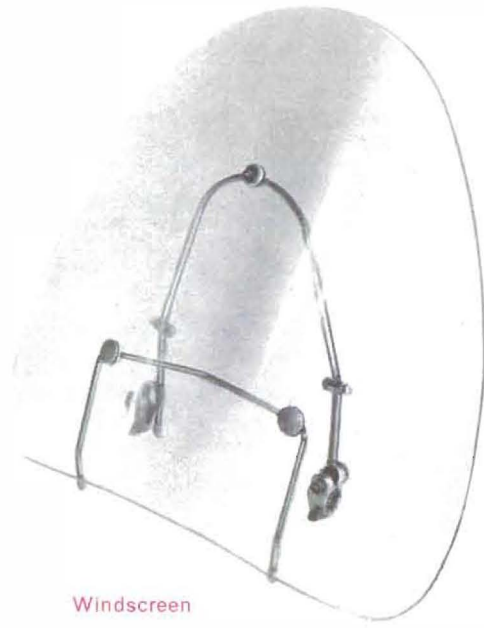
'Arrow'



Prop Stand



Reserve Petrol Tap

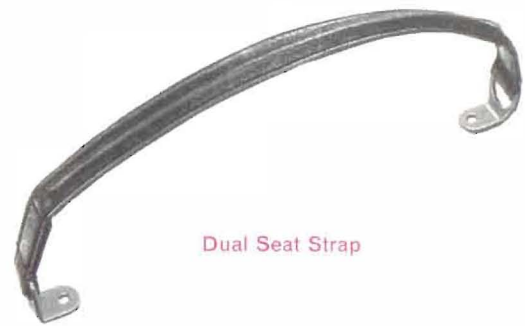


Windscreen

'Arrow' & 'Super Sports'



Carrier with Two Straps



Dual Seat Strap



ARIEL MOTORS LTD.
 BIRMINGHAM 29 • ENGLAND.

Technical Specification

	LEADER	ARROW	ARROW SUPER SPORTS
Engine Type	Twin Cylinder, Two-stroke	Twin Cylinder, Two-stroke	Twin Cylinder, Two-stroke
Bore and Stroke	54 x 54 mm. (2 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ ")	54 x 54 mm. (2 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ ")	54 x 54 mm. (2 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ ")
Capacity	247 c.c. (15 cu. in.)	247 c.c. (15 cu. in.)	247 c.c. (15 cu. in.)
Compression Ratio	10:1	10:1	10:1
Engine b.h.p.	17.5	17.5	20
Engine r.p.m.	7,000	7,000	6,500
Gear Ratio—Top	5.9	5.9	5.9
Third	7.8	7.8	7.8
Second	11	11	11
First	19	19	19
Engine Revs.—Top Gear	1,000—11 m.p.h. (18 km.h.)	1,000—11 m.p.h. (18 km.h.)	1,000—11 m.p.h. (18 km.h.)
Tyre, Front	Ribbed, Whitewall 16" x 3.25"	Ribbed 16" x 3.25"	Ribbed, Whitewall 16" x 3.25"
Tyre, Rear	Studded, Whitewall 16" x 3.25"	Studded 16" x 3.25"	Studded, Whitewall 16" x 3.25"
Wheelbase	51" (130 cm.)	51" (130 cm.)	51" (130 cm.)
Overall length	76 $\frac{1}{2}$ " (194 cm.)	78" (198 cm.)	78" (198 cm.)
Overall width	27 $\frac{1}{2}$ " (69 cm.)	25 $\frac{1}{2}$ " (64 cm.)	25 $\frac{1}{2}$ " (62 cm.)
Dualseat Height	30 $\frac{1}{2}$ " (77 cm.)	28 $\frac{1}{2}$ " (72.5 cm.)	28 $\frac{1}{2}$ " (72.5 cm.)
Ground Clearance	5" (12.5 cm.)	5" (12.5 cm.)	5" (12.5 cm.)
Weight (standard specification) ..	310 lbs. (141 kg.)	285 lbs. (129 kg.)	285 lbs. (129 kg.)
Petrol Tank capacity	3 gallons, including reserve approx. $\frac{1}{2}$ gallon (13 $\frac{1}{2}$ litres)	3 gallons, (13 $\frac{1}{2}$ litres)	3 gallons, including reserve approx. $\frac{1}{2}$ gallon (13 $\frac{1}{2}$ litres)
Approx. Petrol Consumption ..	75-80 m.p.g. (28 km.p.l.)	75-80 m.p.g. (28 km.p.l.)	70-75 m.p.g. (26 km.p.l.)
Approx. Max. Speed	70 m.p.h. (112 k.p.h.)	70 m.p.h. (112 k.p.h.)	78-80 m.p.h. (125-128 k.p.h.)

NOTE: Speed and petrol consumption figures apply to machines that have been run in for 1,000 miles (1,600 km.)
Petrol consumption figures are based on a steady speed of 40 m.p.h. (65 km.p.h.)

TERMS AND CONDITIONS OF SALE AND GUARANTEE

- In this Guarantee the word "machine" refers to the motor cycle, scooter, motor cycle combination or sidecar as the case may be purchased by the Purchaser.
- In order to obtain the benefit of this Guarantee the Purchaser must correctly complete the registration form and return it to us within fourteen days of the purchase.
- We will supply, free of charge, a new part in exchange for, or, if we consider repair sufficient, will repair free of charge any part proved within six months of the date of purchase of any new machine, or within three months of its renewal or repair in the case of a part already renewed or repaired, to be defective by reason of our faulty workmanship or materials. We do not undertake to bear the cost of fitting such new or repaired part or accessory.
- Any part considered to be defective must be sent to our Works, carriage paid, accompanied by the following information:
 - Name of purchaser and address;
 - Date of purchase of machine;
 - Name of dealer from whom the purchase was made;
 - Engine and frame numbers, including prefix letters, of machine.

- This Guarantee shall not extend to defects or damage appearing after misuse, neglect, abnormal stress or strain, or the incorporation or affixing of unsuitable attachments or parts and in particular:
 - Hiring out;
 - Racing and competition;
 - Adaptation or alteration of any part or parts after leaving our Works;
 - The attaching of a sidecar in a manner not approved by us to an unsuitable motor cycle.

This Guarantee shall not extend to machines whose trade mark name or manufacturing number has been altered or removed, or on which has been used any part not supplied or approved by us, or to tyres, saddles, chains, speedometers, revolution counters and electrical equipment or to parts supplied to the order of the Purchaser and different from our standard specification.

- Our liability and that of our dealer who sells the machine shall be limited to that set out in paragraph 3 and no other claims, including claims for consequential damage or injury to person or property, shall be admissible. All other conditions and warranties statutory or otherwise and whether express or implied are hereby excluded and no guarantee other than that expressly herein contained applies to the machine to which this Guarantee relates or any accessory or part thereof.

REPAIRS GUARANTEE

- Whilst the highest standard of workmanship and materials is aimed at, we cannot accept liability for any defects appearing more than three months after the machine, assembly or component has left our Works after being repaired.
- We will repair or replace at our option free of charge any defective work, materials or parts relating to the repairs carried out by us appearing within that time but shall not be under any further or other liability for any other loss or damage whether direct or consequential and our liability shall be limited to the cost of so making good. We do not undertake to bear the cost of fitting such new or repaired part or accessory.
- We do not accept liability in respect of parts of proprietary manufacture, e.g. tyres, saddles, chains, speedometers, revolution counters and electrical equipment which may be used by us in effecting a repair. All other conditions and warranties statutory or otherwise express or implied are hereby excluded.