

# PANTHER

MOTOR  
CYCLES



1938



What we  
think



## INTRODUCTION

The red wing embossed on the engine of the Panther Motor Cycle has now become known as the sign of perfection in design and manufacture.

The improvements incorporated for 1938 in the famous Model 100 will maintain its position as England's leading motor cycle. It is the only motor cycle which has been driven with sidecar across the great Sahara Desert.

For those requiring a light machine with the same complete specification, the Model 85 can be recommended with every confidence for all solo work.

Precisely the same materials, *i.e.*, only those of the finest quality, and manufacturing methods are used on the Red Panthers, and it is our collaboration with Messrs. Pride & Clarke Ltd., and their sales organisation which has made it possible for such outstanding value to be offered to the public.

As a result of the outstanding performance, the economy and durability of the Red Panther, it has become the most popular motor cycle in England.

www.pw.it



# What others think

Canterbury, Kent.  
"After running-in and giving my 1937 Model 100 Redwing Panther its first 'decoke' I wish to let you know that everything was extremely satisfactory and I was very pleased with it.  
"The machine has now done over 2,000 miles and lives up to all that you claim for it. I have worked the petrol consumption out to nearly 90 m.p.g.; it handles perfectly and the silence, both mechanical and exhaust, is very pleasing. In my opinion it is ideal."

Leicester.  
"I take pleasure in writing to you about the Model 100 Panther I bought three weeks ago. I have covered 830 miles on the 8½ gallons of petrol I have purchased, of which there is over ½ gallon still in the tank. At 50 m.p.h. the machine sits on the road as though it were only doing 20 m.p.h. There is no bounce and it steers as straight as an arrow.  
"Starting with the sump full, I did 200 miles by speedometer and then bought a sealed pint of oil, and I had to tip the machine over to get it in and keep it in that position while I screwed the filler cap down.  
"I have been over a few of the mountain passes in North Wales with rough tracks awash, sludge in places, and the machine handled just as easily as main-road riding. Although second and third gears were continually used, the consumption was over 100 m.p.g. and 200 miles per pint of oil. The big headlamp works perfectly, the rear stand is a wonder, and I am quite satisfied."

Gravesend, Kent.  
"I have a Panther motor-cycle Model 100 Redwing 598 c.c. I had it new last October and I have never been sorry from the moment I had it. Everything is made for wear and comfort. I have been motor-cycling for ten years on different makes of machine, but I honestly say there is nothing like the Panther."

Boston Spa., Yorks.  
"In passing, I would congratulate you on making such a wonderful and workmanlike machine as this is, and I only wish I had invested in a P. & M. Redwing seven years ago, instead of buying other makes, which, in my opinion, are selling by name alone. The Panther is more than perfect in every detail, and I wish your firm every success in your future products."

Leeds.  
"I have recently completely overhauled my Model 85/36 after nine months of 10,000 miles, and must express my satisfaction of the engine's condition (May to December). As a newcomer to the motor-cycle, I have been delighted when I found that 'Park Rash', 'Whernside' and many other, more difficult and lesser-known hills, were able to be tackled easily. 'Two-up,' without falter."

Rutland.  
"You will remember me fetching a 1937 350 c.c. Redwing '85' for Mr. W. . . . of L. . . . nearly a fortnight ago. The owner is very pleased with the machine. He says 'it is so different.' Quite frankly, I must congratulate both you and the makers for producing a machine with so many outstanding characteristics. Although riding under 35 m.p.h. the journey of 120 miles was sufficient to estimate the machine's good points. The roads were wet, yet it almost steered itself. Tram lines, wet and greasy, never worried it at all. It would run for miles hands off at very low speeds. In fact, it compares very favourably with my own mount, 1936 Model 100, with which, you know by previous letters, I am wonderfully pleased. I know by experience, of several years' riding, that once this Model 85 is run-in it will have plenty of 'pep' and power and wonderfully good acceleration through the gears. You will remember saying that you would not like my journey? Well, I enjoyed it so much that if it had been twice as far I should not have been tired of the '85.'"

Penzance.  
"Three years ago I purchased a Red Panther; mileage to date 52,845, replacements nil except for tyres and battery. The engine is still perfect in condition and I can assure you that the Red Panther is unbeatable value for the money. Please accept my congratulations on such a trustworthy production."

Romilly, Cheshire.  
"I entered in a hill climb at Hayfield and came away winner of the 250 c.c. and 350 c.c. class. My time was only 3 sec. longer than the winner of the 500 c.c. class."

Aberdeen, Scotland.  
"I want to tell you how much I appreciate my Red Panther machine. I find that I can get over 100 m.p.g. riding the machine quite hard and I can tell you that I am no lightweight."

Wellington, Somerset.  
"I should like to say here in all sincerity that I consider this bike to be one of the finest standard 250 c.c. on the road, if not the finest. How you make them for the money beats me. Some of her achievements are 67 m.p.h. (by speedo), and easy climb of Porlock with two up (22 stone), 32 miles in 42 minutes, 14 miles in 20 mins. (over roads I was only moderately familiar with) and 5 miles in 6 minutes on a road I knew. I did not have her wide open on any of these runs. She has done a non-stop climb of Fingle Bridge trials hill and she'd make a clean sweep of our local hills if she had a deep grip tyre. The steering is perfect; hands off, two up, at 55 m.p.h. is easy. I use National Benzole petrol and Castrol R in her and find that this combination gives the best results. You can use this letter either wholly or in part just as you like."

Worcester.  
"It is a 'dream of perfection' from the moment one pushes the starter down; whilst in appearance alone it stands out on its own."

Finchley, N.3.  
"I would like to say how pleased I am with my 248 c.c. Red Panther. Its performance has surpassed my most optimistic expectation. I have possessed five other machines of different make but the Panther 'knocks spots off them.'"





# REDWING

## SPECIFICATION

### MODEL 100. 598 c.c. REDWING PANTHER

**ENGINE.** The latest internal combustion engine practice is embodied in this remarkable unit. As the valve mechanism is built into the cylinder head, there is only one joint, i.e., that necessary for the aluminium cover. The engine is, therefore, perfectly oil-tight, the whole of the valve mechanism being flood-lubricated, excess oil returning through a large diameter pipe direct to the sump.

**HANDLEBARS.** Fitted with quick-action twist-grip and mounted in rubber shock-absorbers.

**FRAME.** The engine forms part of the frame. This unique method of construction providing immense strength combined with lightness and absolute rigidity. It has proved to be the perfect form of construction for sidecar work.

**CHAIN ADJUSTMENT.** The gearbox and back wheel spindles are both fitted with twin cams so that adjustment cannot affect the alignment of either wheels or chains.

**BRAKES.** Inter-connected and operated by Bowdenex cables which are fitted with grease-gun nipples, securing lubrication of the inner wires, thereby ensuring permanent ease of brake operation. Seven-inch front, 8-in. back, fitted with independent hand adjustment and quickly detachable to ensure rapid wheel removal.

**GENERAL.** Burman 4-speed positive foot control. Ratios 4.3, 5.8, 7.3, 11.5.

**PRICE**  
With Equipment

**WHEELS.** 3.25 x 19 in., fitted with large ball journals requiring no adjustment. Internal drive for speedometer provided in front hub.

**SILENCER.** The latest type Burgess Absorption silencer, originally designed for Panther machines, is fitted to all Redwing models.

**FINISH.** Black. Chromium rims with black centres and red lining. Chromium tank with ivory panel bordered with black and red lines.

**MAXIMUM SPEED.** 85 m.p.h. solo. Sidecar: 65 m.p.h.

**PETROL CONSUMPTION.** Solo: 100 m.p.g. Sidecar: 70 m.p.g.

**OIL CONSUMPTION.** Solo: 2,000 m.p.g.

**WEIGHT.** 395 lbs. (including standard equipment).

**OVERALL LENGTH.** 83 in.

**WHEEL BASE.** 54 in.

**SADDLE HEIGHT.** 26 in.

**ACCESSIBILITY.** In an official A.C.U. test on October 8th, 1935, the following proof of accessibility was recorded:—

Time for removal of back wheel .. .. .	1 min. 27 secs.
Time for removal of front wheel .. .. .	1 min. 39 secs.
Time for removal of sidecar .. .. .	1 min. 20 secs.

www.howzit

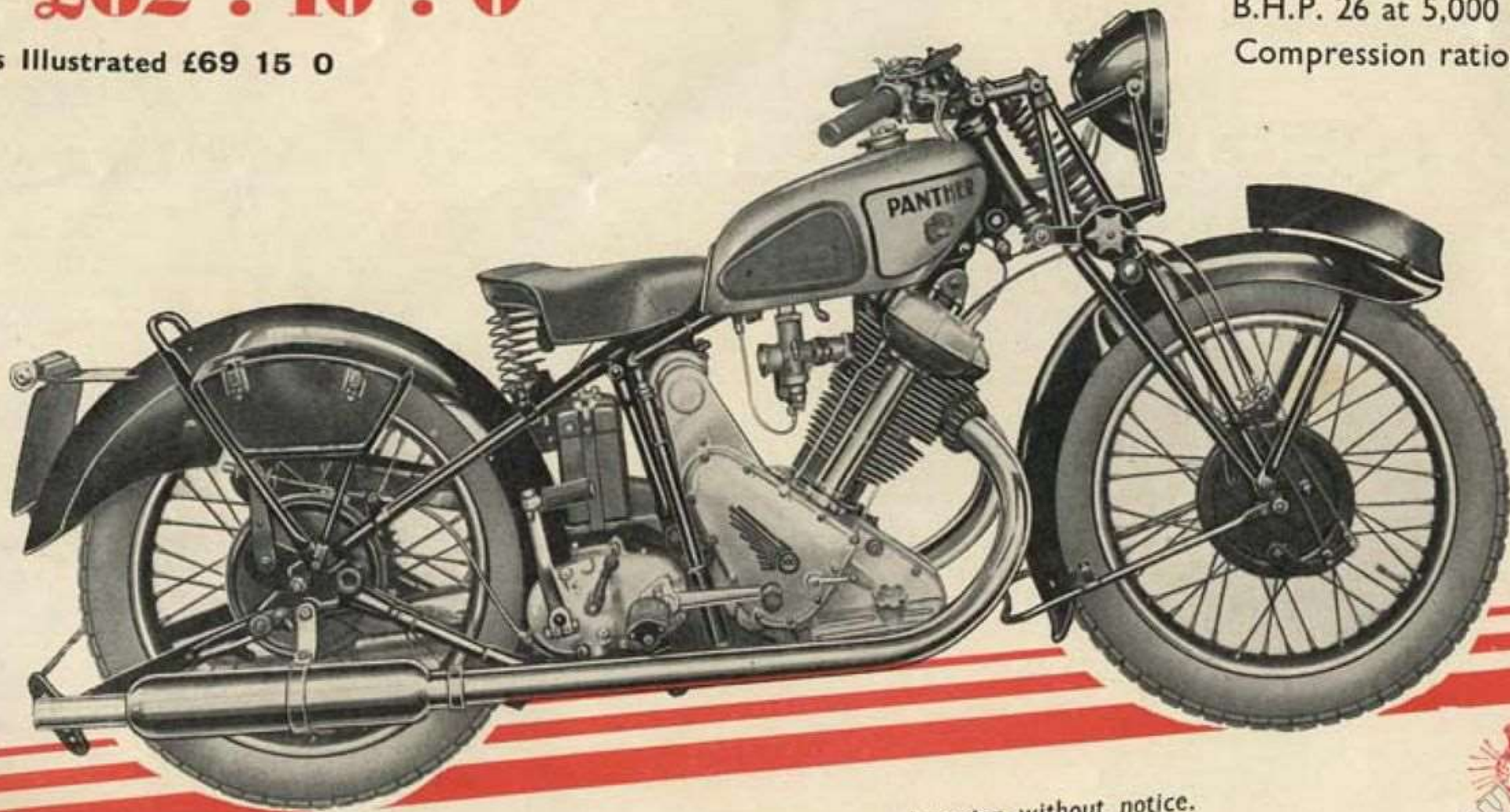


# MODEL 100

£62 . 10 . 0

as Illustrated £69 15 0

598 c.c. 87 × 100 r.p.m.  
B.H.P. 26 at 5,000 r.p.m.  
Compression ratio, 6.5.



All Prices and Specifications subject to alteration without notice.





## SPECIFICATION

MODEL 85. 348 c.c. REDWING PANTHER

# REDWING

## PRICE

With Equipment

**ENGINE.** Designed and built on the same lines as the Model 100, this two-port unit gives exceptionally sweet running and has a high power output.

**IGNITION AND LIGHTING.** Miller Dynomag.

**FRAME.** Straight tubes throughout.

**WHEELS.** 3.25—19 in. Fitted with large diameter journal bearings. Front hub has provision for internal speedometer drive.

**FINISH.** Black. Chromium rims with black centres and red lining. Chromium tank with ivory panel bordered with black and red lines.

**WHEEL BASE.** 54 in.

**WEIGHT.** 300 lbs.

**PETROL CONSUMPTION.** 105 m.p.g.

**OIL CONSUMPTION.** 2,500 m.p.g.

**GEAR BOX.** Burman 4-speed Positive Stop Foot Control. Ratios 5.25, 6.72, 9.25, 14.0

www.fpw.it

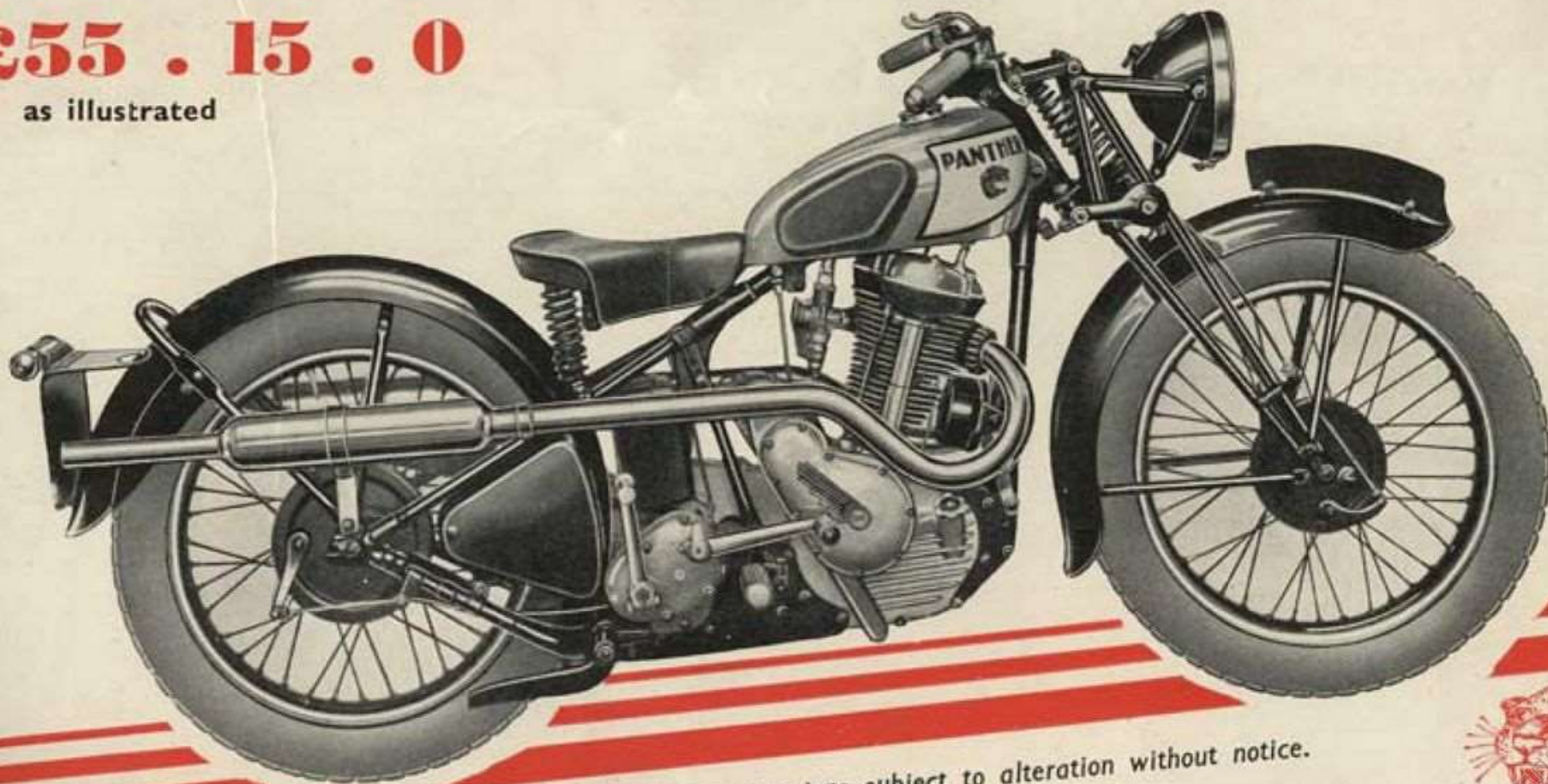


# MODEL 85

£55 . 15 . 0

as illustrated

348 $\frac{7}{8}$ c.c. 71 × 88 m/m.  
B.H.P. 18 at 5,500 r.p.m.  
Compression ratio, 6.5



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## SPECIFICATION

# RED PANTHER

## PRICE

### 250 c.c. RED PANTHER. MODEL 20

**ENGINE.** Speed: 65 m.p.h.  $\frac{1}{4}$ -in. gudgeon pin secured by circlips. Roller bearing main shaft and double roller-bearing big end. Piston:  $3\frac{1}{2}$  in. long with oil control ring, completely eliminating piston slap. Compression:  $6\frac{1}{2}$  to 1. 248 c.c.  $60 \times 88$  mm. B.H.P. 11 at 5,500 r.p.m.

**LIGHTING AND IGNITION.** By built-in Miller dynamo and coil. Contact-breaker mounted in an accessible position on the timing case cover. Instantaneous starting. Starting switch fitted with detachable key.

**GEAR.** Burman 3-speed gear with hand-control. Pivoting type. Adjustment of primary chain controlled by twin eccentric cams ensuring permanent chain alignment. Gear ratios: 5.9, 9.5, 15.5.

**FRAME.** Of the finest weldless steel tubing throughout. All tubes are straight, giving exceptional strength. Duplex saddle tubes with unique battery mounting platform. Chain stays attached to bottom bracket by malleable castings, ensuring maximum rigidity.

**CARBURETTER.** Latest type Amal, semi-downdraft, giving exceptional performance with great economy. (Over 100 m.p.g.)

**TRANSMISSION.** By  $\frac{1}{2} \times .305$  Coventry chains, front being automatically lubricated. Transmission shock absorber incorporated in the clutch.

**WHEELS.** Heavy duty oversize (20 in.) rims with  $26 \times 3.00$  tyres ensure comfort and superb steering. Hubs fitted with large cup-and-cone bearings, twin cam adjustment to rear wheel and gear box ensures correct and permanent alignment.

**BRAKES.** Powerful brakes are provided. Rear: 6 in.; Front: 5 in.

**HANDLEBARS.** 1 in. in diameter, fitted with twist-grip throttle. Grouped controls with automatically locking micrometer adjustment of friction surfaces.

**STAND.** A central spring-up stand is fitted, which is particularly easy to operate and enormously strong.

**SADDLE.** Dunlop waterproof saddle of large dimensions mounted on long supple springs.

**FOOTRESTS.** Round section rubber-covered, fully adjustable.

**FORKS.** Special Webb tubular forks with independent hand adjusters for shock absorbers.

**EXHAUST SYSTEM.** Straight-through pipe, downswept to large chromium-plated expansion chamber. Internal baffles permanently welded and the expansion chamber is attached to the frame by welded lugs, eliminating all loose clips.

**MUDGUARDS.** Deep "D" section, beaded and flared at front and rear ends, giving good protection under all conditions. Rear mudguard end is valanced and hinged to facilitate wheel removal.

**TANK.** Welded steel saddle type, chromium-finished with rear enamelled panel and fitted with large, quickly detachable filler-cap large and comfortable knee-grips. Capacity: 2 gallons.

**EQUIPMENT.** Includes tyre inflator, large metal tool-case, complete tool kit and grease gun. Electric horn and licence holder, front and rear number plates.

**FINISH.** All external nuts and bolts are rustproof and all bright parts are chromium plated. The mudguards are finished red to match the tank panel.

### 350 c.c. RED PANTHER. MODEL 30

(See next Page.)

The general specification of this machine follows that of the Model 20, with the following alterations:—

**ENGINE.** 348 c.c.  $71 \times 88$  mm. B.H.P. 15 at 5,500 r.p.m.

**WHEELS.** Heavyweight hubs,  $26 \times 3.25$  tyres on 19-in. rims.

**BRAKES.** 7 in. rear, 6 in. front.

**CARBURETTER.** Amal large bore.

**SILENCER.** Of larger dimensions.

**FRONT FORKS.** Heavier type.



# ER MODEL 20

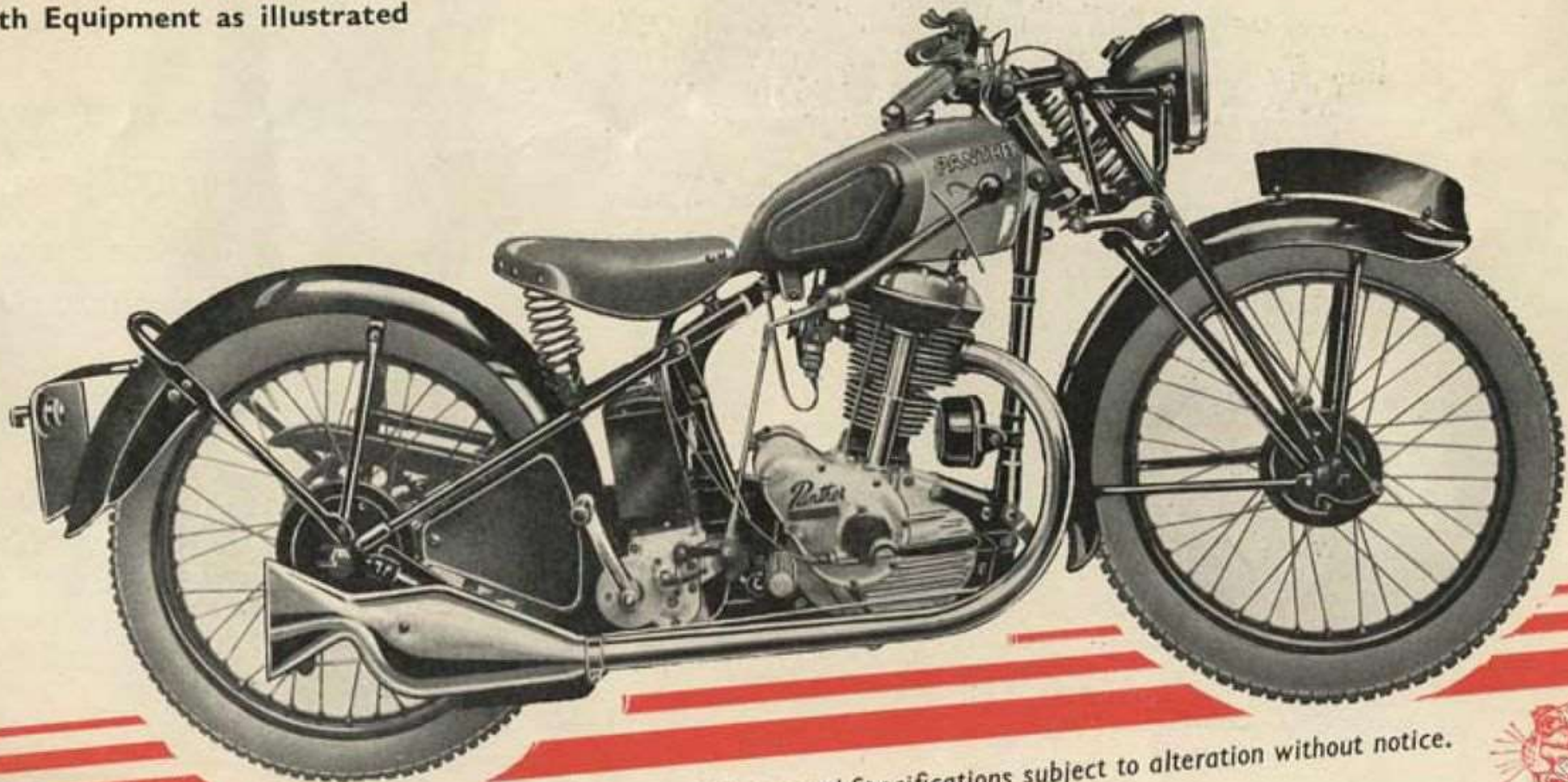
£35 . 0 . 0

With Equipment as illustrated

Obtainable only  
from

PRIDE & CLARKE Ltd.

158 STOCKWELL ROAD,  
BRIXTON, S.W.9



All Prices and Specifications subject to alteration without notice.





# EXTRA EQUIPMENT

## REDWING MODELS

**DE-LUXE LIGHTING (for Models 90/100 only).** Twin 6-in. lamps with patent Panther dip and swivel control from left-hand twist grip. 50-watt dynamo and stop light. Position for illuminated clock also provided. It is important to note the de-luxe lighting set as detailed above costs only £4 3 6 more than the standard lighting equipment. As the latter does not incorporate a speedometer, which in itself costs £2 5 0, the actual extra cost of the Panther patented twin lighting system—twist grip operation, 50-watt dynamo, stop light and instrument panel—is only 38/6.

This system provides a luxurious, intensely practical and trouble-free illuminating system which has stood the test of five seasons' use and is strongly recommended. The necessary power output for the high efficiency lamps is provided by a special 50-watt Miller dynamo, housed in a bracket built into the frame, and is driven by a silent duplex chain automatically lubricated and fully enclosed. The swivelling apparatus enables one lamp to be turned round so that it will pick out the edge of the road, and enable the machine to be driven safely during the thickest fog. The other lamp is automatically switched out. The operation can be reversed for countries where right-hand drive is the rule.



Panther patented Twin Lighting System.

**FOLDING PILLION FOOTRESTS.**

Models 90/100 .. .. .  
85 .. .. .  
**PILLION CUSHION CARRIER** .. .. .  
**8-DAY CLOCK** .. .. .  
**IVORY AND GREEN FINISH** .. .. .

	£	s.	d.
with internal	2	10	0
extra	0	2	6
	0	8	6
	0	4	6
	0	12	6
	0	15	0
	1	10	0
	1	5	0

## RED PANTHER MODELS

Folding Pillion Footrests .. .. .  
Pillion cushion .. .. .  
Upswept exhaust pipe with round silencer .. .. .  
4-speed foot control gear and left-hand brake .. .. .  
Speedometer (as Redwing) .. .. .  
Carrier .. .. .

	£	s.	d.
	0	4	6
	0	8	6
	1	0	0
	3	12	6
	1	0	0



www.rpww.it



# RED PANTHER

PRICE  
with Equipment  
as Illustrated

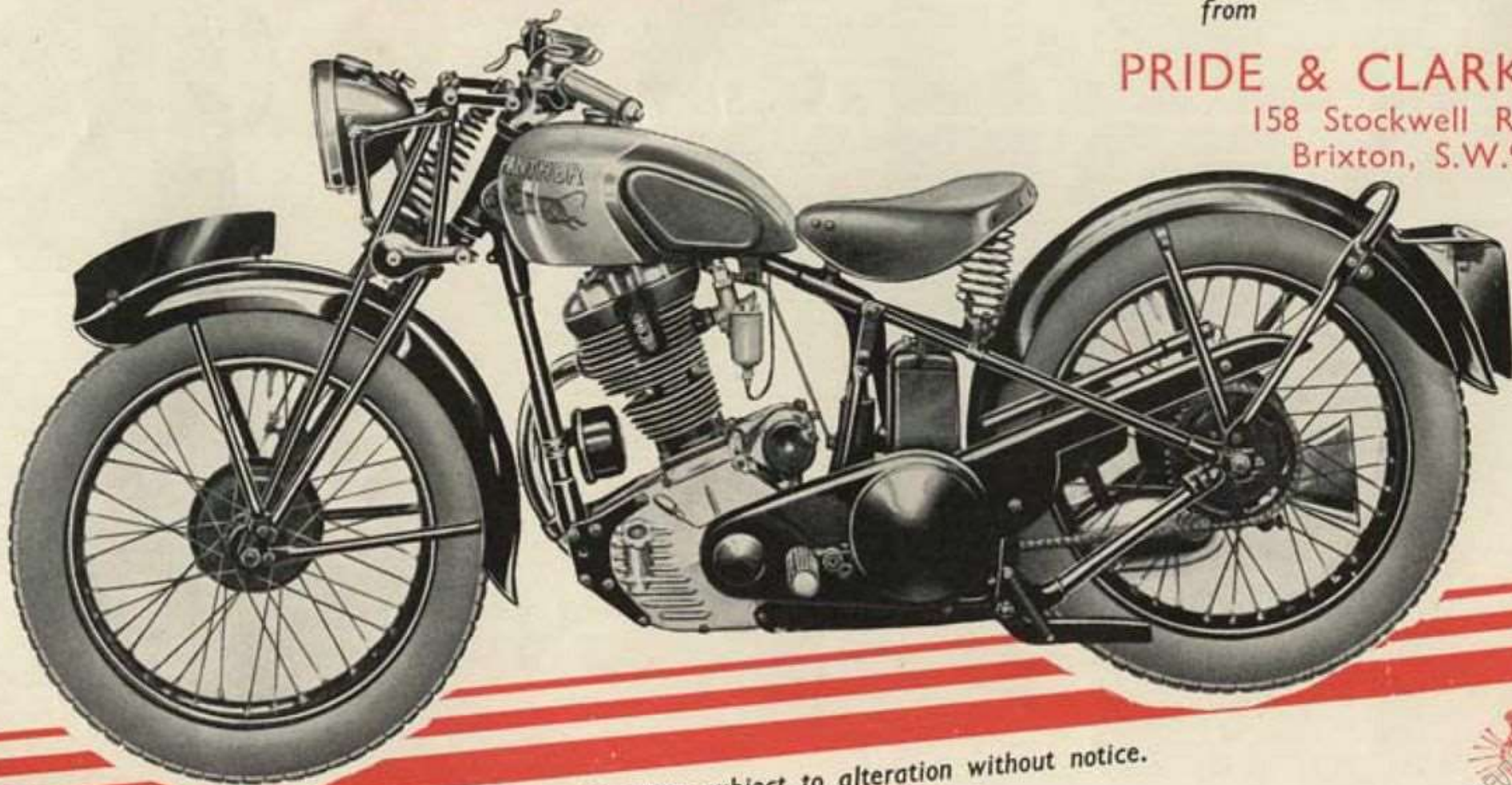
£39.10s.

MODEL 30

Obtainable only  
from

PRIDE & CLARKE Ltd.

158 Stockwell Road  
Brixton, S.W.9

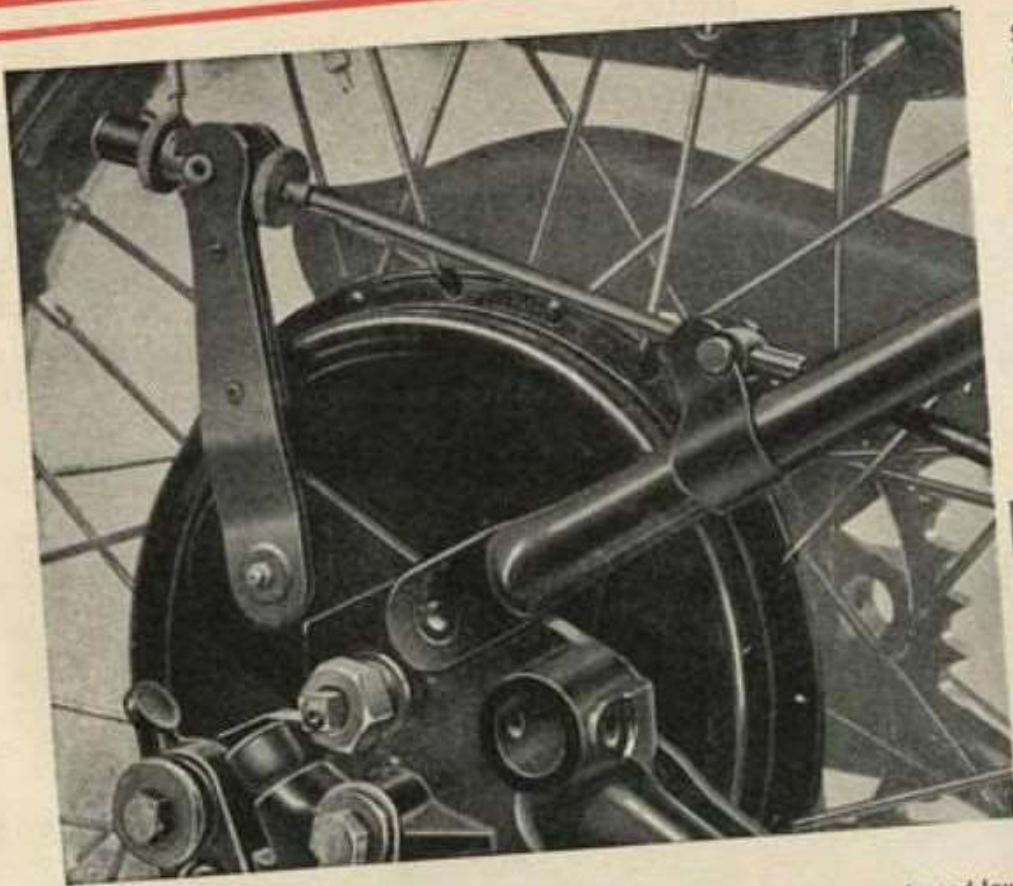


All Prices and Specifications subject to alteration without notice.





# PANTHER



Shows the hand adjustment to the Bowdenex cable back brake, and the slotted lever and stop-lug which enable the brake to be instantly disconnected for back-wheel removal. Note the squared end of the hub spindle (which is self-aligning) for back chain adjustment, there being no adjusters which permit the wheel to be pulled out of centre, and interfere with wheel removal.

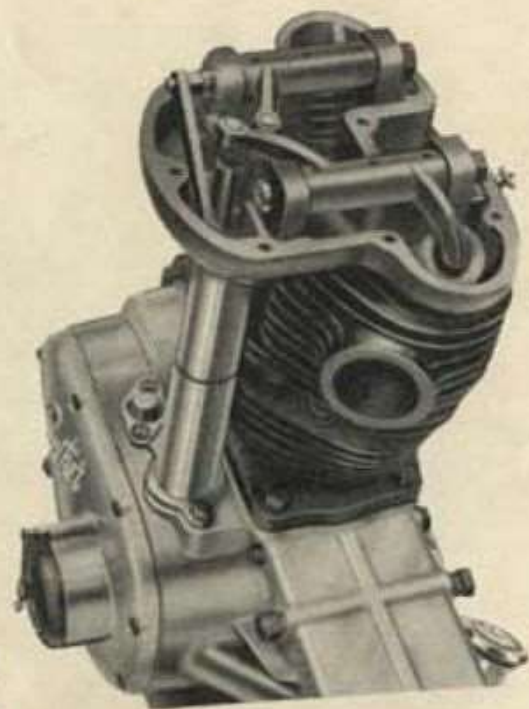
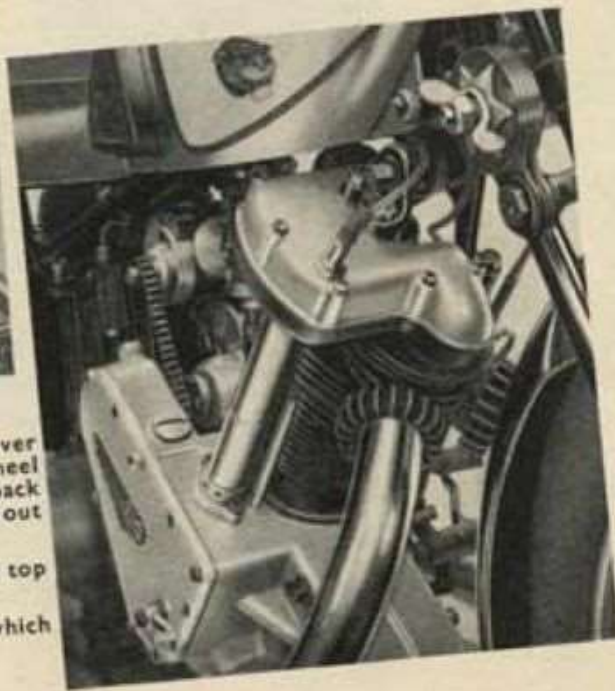
Note also the rubber buffer which cushions and silences the back stand. The top end of the stand which abuts against the rubber can be seen.

The frame lug which enables a sidecar to be fitted on the right-hand side or which can be used for a hinged pillion rest is also shown.

Shows the silent duplex chain drive to dynamo, which is eccentric for chain adjustment. The dynamo bracket is large enough for the 50-watt dynamo which is fitted for the twin lamp set, the aluminium block shown in the illustration being removed.

Note that the dynamo drive is from the timing case, and there is absolutely no strain on the magneto, which is provided with a unique universal coupling.

The polished aluminium case for the valve mechanism is recessed on the far side to permit of cooling fins around the 14 mm spark plug. Note the large frictional area of the fork shock absorber. Also the very large magneto and decompressor lever for easy starting.



This illustration shows the engine with the aluminium head cover removed. Pressure lubrication is provided to all working parts and a return flow is provided through a large channel cast in the cylinder wall and connecting with the sump. The Panther oil pump has no springs, balls or valves, and failure is impossible. The oil is in continual circulation the engine being the wet-sump type.

www.bhp.com



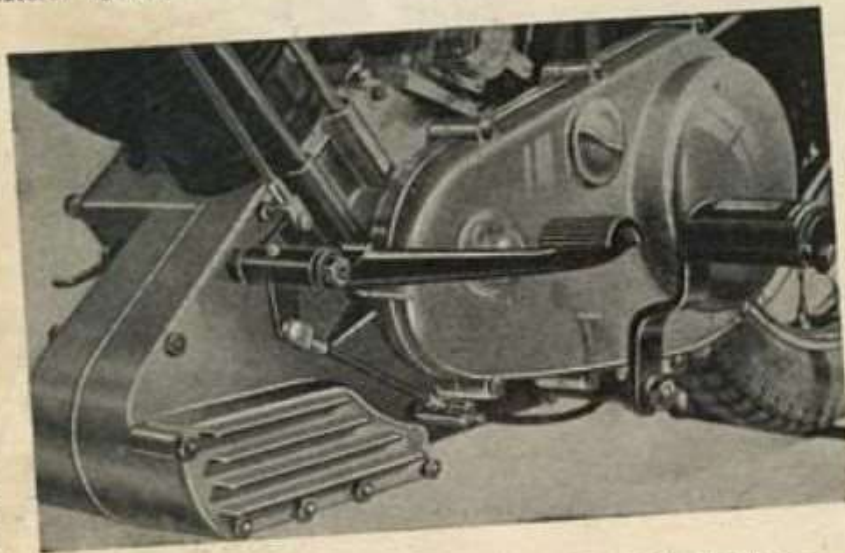
# FEATURES



The rubber-cushioned drive in the back wheel of the Redwing Panthers largely accounts for the exceptional sweetness of the transmission and long chain life. The drive is transmitted through the vanes on the sprocket which lie between each pair of rubber blocks. The side-plate bolts pass through the slots on the sprocket and ensure lateral rigidity.



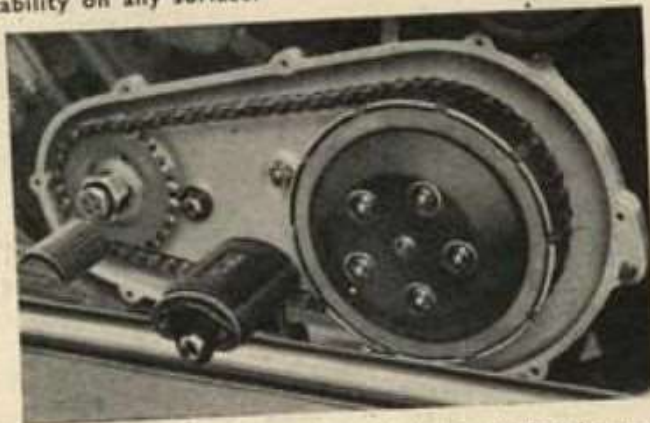
The modern type of O.H.V. motor cycle was pioneered by us in 1923, and this illustration shows the cleanness of design characteristic of all perfected products. We are to-day the largest producers of 250 c.c. O.H.V. engines which is here illustrated. Note the heavily-ribbed die-cast crank-case and oil sump, which form one unit.



Note how both brakes are coupled to the pedal, the large chain-case inspection plate, the oil sump and (on the far side) the decompressor for easy starting.



Shows that valuable feature of the Panther justly known as "The Perfect Stand." The radius of the foot is such that if the lifting loop is pulled with one hand the machine literally lifts itself on to the stand. Note its great width to ensure stability on any surface.



Shows the oversize 5-spring clutch, the outlet for the engine shaft diaphragm valve and the oil well and adjuster for lubrication of the back chain. This oil well is automatically kept filled. Note also the enormously strong footrest bracket.



## SOME COMPETITION SUCCESSES

### 1937 SEASON

- International Six Days—  
 September, 1936 ... { 2 Gold Medals.  
 " 1937 ... { 1 Silver Medal.
- Bemrose Open Trial ... Cup for best sidecar performance.
- Cotswold Open Trial ... Cup for best sidecar performance.
- Mitchell Open Trial ... Cup for best sidecar performance.
- Wye Valley Open Trial ... Cup for best sidecar performance.
- Scott Open Trial ... Rose Bowl for best performance under observation.
- Lancashire Grand National ... 1st Class Award and member of winning team.
- Scottish Six Days ... 2 Silver Medals.  
 Ilkley Grand National ... 1st Class Award.
- and dozens of Awards in Closed and Club Competitions.

## GUARANTEE

Any part or parts of the Motor Cycle which may be or become defective through faulty material or workmanship will be repaired or a new part or parts supplied in exchange free of charge provided such part or parts is or are before the day of 19 sent carriage paid to PHELON & MOORE LTD., CLECKHEATON, YORKS, and provided also that the numbers stamped on the crankcase of the machine from which the part or parts is or are taken is supplied at the same time.

This Guarantee shall not apply to any articles not manufactured by PHELON & MOORE LTD., and is likewise excluded where the defects are caused by misuse or neglect or in cases where the goods of PHELON and MOORE LTD. have changed hands or have been let out on hire.

The term "misuse" includes the attachment of a sidecar to a motor-cycle, which, being designed for solo use, has no lugs for attaching a sidecar incorporated in its design.

All other Guarantees, Representations, Warranties or Conditions whether expressed or implied and whether statutory or otherwise and every liability (if any) for consequential damage by reason of any defect latent or otherwise are and is hereby expressly excluded and the Owner shall be deemed to waive the same accordingly.

The Guarantee expires twelve months after despatch of the machine from the Works, and the full six months' guarantee therefore only applies in the case of machines which have not been in stock at Agents for a period of more than six months.

NOTE.—This Guarantee is issued to every buyer on receipt of the card duly filled in. This card is placed in the sealed tool bag of every machine.

A list of component manufacturers is given on the next page.

**WARNING.—THE GUARANTEE IS RENDERED NULL AND VOID AND NO RESPONSIBILITY CAN BE ACCEPTED FOR ANY OF OUR MACHINES TO WHICH PARTS NOT MANUFACTURED BY US HAVE BEEN FITTED. GENUINE SPARE PARTS ARE STAMPED WITH THE PANTHER HEAD TRADE MARK.**

www.pwolt.com



## COMPONENT MANUFACTURERS

- TYRES.**—Messrs. Dunlop Ltd., Fort Dunlop, Birmingham.  
Messrs. Firestone Ltd., Gt. West Road, Brentford, Middlesex.
- MAGNETOS.**—Messrs. B.T.H. Ltd., Alma Street, Coventry.
- OTHER ELECTRICAL EQUIPMENT.**—Messrs. H. Miller & Son Ltd., Aston Brook Street, Birmingham.
- GEAR BOXES.**—Messrs. Burman & Sons Ltd., Ryland Road, Birmingham.
- SPEEDOMETERS & CLOCKS.**—Messrs. H. Smith & Son Ltd., Cricklewood Works, N.W.2.
- CARBURETTORS.**—Messrs. Amal Ltd., Holford Works, Perry Barr, Birmingham.
- HANDLEBARS & CONTROLS.**—Messrs. Amal Ltd. (address as above).  
Messrs. Bowden Ltd., Victoria Road, Willesden Junction, N.W.10.
- SPRING FORKS.**—Messrs. H. Webb & Co. Ltd., Tame Road, Witton, Birmingham.
- CHAINS.**—Renold & Coventry Chain Co. Ltd., Didsbury, Manchester.

## SERVICE AND SPARES

*Sole Distributors of RED PANTHER Models :*

Messrs. **PRIDE & CLARKE Ltd.**,  
158 Stockwell Road,  
London, S.W.9

*Sole Distributors of REDWING Models :*

Messrs. **GEORGE CLARKE (Motors) Ltd.**,  
278 Brixton Hill,  
London, S.W.2

and  
275 High Street,  
Acton, W.3

**LONDON, W.1.**—Beach Motors,  
166 Great Portland Street.

**YORKSHIRE.**—Messrs. Frank Leach Motors,  
York Street,  
Leeds, 9.

**LANCASHIRE.**—Messrs. Pemberton's Garage,  
School Lane,  
Rochdale.

**DURHAM.**—Mr. T. Cowie,  
1 Matamba Terrace, Hylton Road,  
Sunderland.

**SURREY.**—Messrs. Chidley Motors,  
313 Hook Rise,  
Kingston By-Pass.

**ESSEX.**—Belle Vue Motors,  
470 Southchurch Road,  
Southend-on-Sea.

**Instruction Booklets.**—An instruction booklet is supplied free with each machine. Extra copies can be supplied at 1s. each, including postage. The price of spare parts list is 1s., including postage. Parts will be despatched c.o.d. unless the order is accompanied by P.O. covering cost of parts and postage.

## HIRE PURCHASE

There are no restrictions on the hire purchase terms under which Panther Motor Cycles can be sold, and terms to suit the buyer's individual requirements can readily be made.

**Export:** Representatives are established in all the Dominions and in most foreign countries. Particulars will be furnished on request.

**Cost of Packing for Overseas.**—Cost of case (machine disassembled to conserve space), £1 5s. 0d.

**Cost of Continental packing.**—Cost of crate, 15s. 0d.







Sales and Export :  
324 REGENT STREET  
LONDON, W.1  
Telephone : Langham 2850  
Telegrams : Phelmor, London

**PHELON & MOORE LTD**

Works :  
CLECKHEATON, YORKS  
Telephone : Cleckheaton 129  
Telegrams : Geared, Cleckheaton

