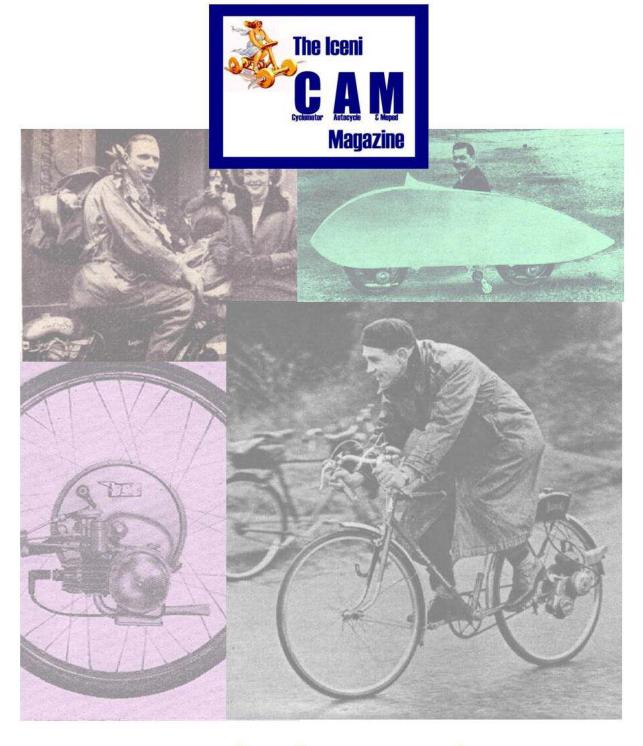
IceniCAM Information Service



www.icenicam.org.uk



Published by SINCLAIR GODDARD & CO., LTD.

Vol. 163, 1952

MATIONWIDE OPINION!

THOUSANDS OF OWNERS SAY THAT POWER PAK IS THE BEST MOTOR

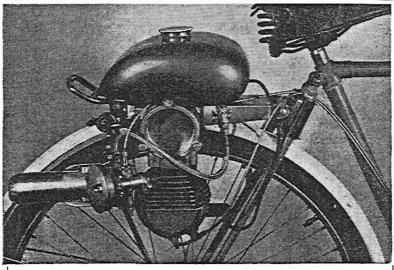
The public are continuously being told by manufacturers how good their products are. In order to find out just what the many thousands of owners think of the Power Pak Bicycle Motor it was decided to ask them frankly. As the makers do not come into direct contact with the user, they approached a number of leading recognised dealers throughout the country, who between them have sold and are responsible for maintaining thousands of Power Paks and who also sell other makes of bicycle motors.

They were asked to give their candid opinion. The replies must surely be the finest set of references ever held by any manufacturer.

Every letter contained only the highest possible praise and we must state that we were overwhelmed by the complete satisfaction that the Power Pak bicycle motor has given.

We have not rested on our laurels however, and have studied in every detail how we can add to this amazing success and as a result we proudly present the 1952 model.

Shown here is a letter from a cycle agent established in 1853, giving his unbiased opinion.





BENSONS FOR BIKES

PRAMS BENSONS FOR

CYCLES, TYRES and ACCESSORIES. PLATING. ENAMELLING.

51 & 53 LOWTHER STREET. YORK. and 45 GOODRAMGATE . Y

OUR REF.: JB/FC.

Messrs. Sinclair, Goddard & Co. Ltd., 162, Queensway, Bayswater, LONDON, W.2.

9th, October 1951.

SUNBEAM, RALEIGH, HOPPER, ROYAL ENFIELD,

HUMBER, B.S.A., HERCULES AND

PEERLESS CYCLES.

Dear Sirs,

With reference to your letter of the 4th. inst.

ref: LFF/TT.

It gives me great pleasure to give you my unbiased opinion of the Power Pak. Having now sold approx. 100 of these motors we have not a single dissatisfied customer, and sales are increasing owing to their 100% reliability and performance - which is second to none!

I can personally wouch for this as I have tried The dam personally vouch for this as I have three most makes, and there is nothing to equal the Power Pak - for power, vibrationless running and reliability, and it is truly an amazing little motor. I may add that when we have had these motors in for decarbonizing - some two and three times, having run approximately eight to ten thousand miles - we have not fitted a single replacement part, and every motor is running perfectly.

Furthermore, it is surprising the tyre mileage our clients are getting, anything up to five and six thousand miles. While on other makes of motor some are not getting even half that mileage. We have made a friend and a satisfied client with every Power Pak we have sold.

In conclusion, may we congratulate you for having produced such a perfect trouble free little motor which is such a pleasure to handle, and is undoubtedly the 'Rolls Royce' of cycle motors - the definition we always apply when selling or alluding to Fower Fak cycle motors.

Assuring you of our closest co-operation at all times,

Yours faithfully. Benea BENSONS for BIKES

AGENTS' LETTERS CONTINUED OVERLEAF

AGENTS' LETTERS

THE ORIGINAL LETTERS MAY BE EXAMINED BY ANYONE

Hornchurch and Romford District Agent-

" Performance is definitely satisfactory with "Performance is definitely satisfactory with solo cycles, even with sidecars carrying window cleaners' ladders, etc., and tandems with sidecars attached, in all weathers and over cobblestoned roads—performance is as perfect in torrential rain as in dry conditions, with no "slip" on the lyre—does not produce undue lyre wear—compares more than favourably with other makes in performance, structure and attheramers."

Rugby District Agent-

"After twelve months of selling we are perfectly satisfied with the performance—undoubtedly the best bicycle motor on the road—very reliable—can really be called trouble free—does not cause undue tyre wear—could have sold double the quantity"

Cheltenham District Agent-

"Perfectly satisfied with the performance— thoroughly reliable—undue tyre wear yet to be experienced by us—finest little job on the road —customers always voicing their praise."

Margate District Agent-

"Performance extremely good and consistent from engine to engine—undoubtedly a very reliable motor and very free from troubles—the drive does not cause any undue wear on the tyre at all—no comparison of the Power Pak with other makes—in a class all of its own."

Newquay, Cornwall District Agent-

"Our appreciation of the design and performance!—proved to be the ideal, especially in wet weather—the "Everlast" drive causes no undue tyre wear and is constant in all weathers—customers' report it is most reliable and trouble free—we could have sold many more Power Paks."

Malvern District Agent-

Marvern District Agent—
"How satisfied we are, also our customers!—
performance and reliability in our very hilly
district is all that can be desired with solo and
tandem machines—in every case it is a
pleasure to serve them and hear their praises
for the motor and of the enjoyment and utility
they obtain—proved trouble free—wear on
tyres is very small—it is a first class job."

Cardiff District Agent-

"More than satisfied with its performance— no trouble whatsoever—tyre wear is almost negligible."

Edinburgh District Agent-

"Performance is excellent—trouble free service—no evidence of undue tyre wear."

Wolverhampton District Agent-

Wolvernampton District Agent—
"After twelve months experience we, and our customers, are quite satisfied with performance—the motor is excellent mechanically, quality being obvious—most noticeably true that tyre wear is negligible—outstanding feature is very few spares needed by owners—performance is higher than other makes, both in sustained effort and m.p.h."

Bromley, Kent District Agent-

bromley, Kent District Agent—

"Our satisfaction with the good condition of motors when they arrive and the excellent performance they give right from the start—all proved very reliable—service work is negligible—no complaint of "slip" in wet weather—all customers agreeably surprised at mileage obtained from tyres—impressed by smooth power and aimost complete lack of vibration—general appearance excellent—only hope you will be able to continue to let us have as many as we want."

Kilmarnock District Agent-

"Highly satisfactory in every way—compares favourably with any other unit—does not cause any wear on the tyre—it is definitely a positive drive."

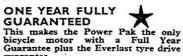
Aylesbury, Bucks. District Agent-

"We are satisfied with the performance of the Power Pak—the Power Pak is a reliable motor—performance better than any power-driven cycle."

POWER PAK present

DOUBLE GUARANTEE!

So successful and reliable has Power Pak been and so confident are we that we have catered for every possible desire, that we are doubling the guarantee period to



POWER PAK POINTS

There is no learning required with the Power Pak Bicycle Motor. Fit on—sit on—and drive away. For pedalling simply raise the Engaging Lever and the motor is lifted off the tyre. The machine immediately becomes a straight-forward pedal cycle with no resistance whatsoever

from the motor because, with the "Everlast" Tyre Drive, you are not pedalling "through" a clutch.
When motorised, the bicycle becomes a vehicle. As such it is necessary to have a reserve of power when travelling at a cruising speed. Power Pak has this in abundance. It also becomes a "braking unit" when you decelerate.

When fitted with a Power Pak the bicycle has less tendency to skid as the low centre of gravity and the pull of the motor stabilises the machine giving smooth vibrationless running. As vibration is the prime cause of cycle deterioration there are no cycle maintenance costs when using a Power Pak motor.

It is the simplest and easiest to maintain and is operated with one finger tip control only.

No exertion is required to startstop—engage or disengage and yet: Power Pak is faster, has greater power, acceleration and hill-climbing capacity than any motor of its class. What is the secret of this amazing motor?

•A perfect design which has been tested for five long years. It is lavishly built, and manufactured to the finest specifications using only the best quality materials and components.

OCritical measurements are maintained to two-tenths of one thousandth of an inch, which is ten times thinner than a human hair.

The Power Pak bicycle motor is not mass-produced. It is precision built and individually assembled, every component being inspected and every motor being tested and tuned.

Thus it is not possible for a faulty Power Pak to leave the factory.

Swansea District Agent—
"How pleased we are with the performance of the Power Pak !—how much we value the Power Pak agenty!—we have not had a single complaint—what makes the riders so pleased is their remarkable performance over other makes—tyre wear is negligible—looking forward to very many years of profitable trading with you."

"The motor has never failed me—on all occasions the Power Pak performs admirably—and starting trouble—the never experienced any starting trouble—the motor with the least number of after sales troubles."

their 1952 model

INCORPORATING THESE ADDITIONAL FEATURES

NEW PETROL TANK

with a capacity of half a gallon plus.

NEW PATENTED ' EVERLAST'

DRIVING ROLLER

which should outlive any roller yet produced.

NEW **DECOMPRESSOR ADJUSTER**

for better cable adjustment.

NEW ' NON-FLOOD ' CARBURETTOR

that functions perfectly over uneven road surfaces.

PLUS The following Pak Power Accessories REAR CARRIER (Regd.) fitted in minutes to the Power Pak.

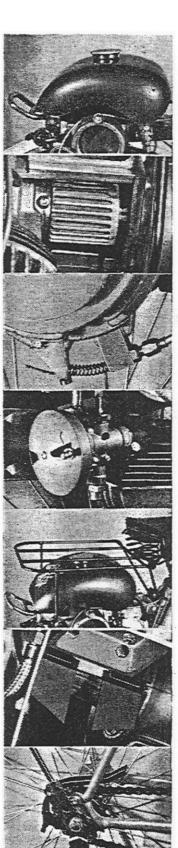
ANTI-SPLASH GUARD (Pat. App.)

where deep valanced mudguards are not fitted.

FREEWHEEL GUARD (Pat. App.)

where a chain guard is not fitted.

NOTE: ALL EXISTING POWER PAK MOTORS CAN BE FITTED WITH THESE



Family cover 1,500 miles on three wheels! a user write:

10,000 Miles of Trouble-free Running

Messrs. Sinclair Goddard & Co., Ltd., 162, Queensway, LONDON, W.2.

I would like to report, that with a Power Pak motor fitted to my tandem, I have travelled approximately 10,000 miles, 1,500 miles with my wife on the back and daughter in the sidecar, and have experienced no mechanical troubles whatso-The motor has never let me down.

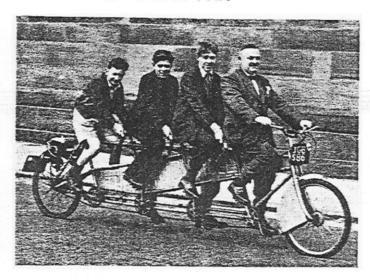
I have not experienced any oiling plugs or starting trouble. I have had no extra maintenance costs or repairs, either to the motor or my tandem, since fitting the motor. I decarbonise the motor myself in three-quarters of an hour, and I find the tyre wear to be very satisfactory indeed, as I have just done 1,500 miles on one tyre, and the tread is hardly worn.

The power available from this little motor is amazing, and is ample to pull family and myself quite comfortably on the flat WITHOUT TURNING THE PEDALS, whilst with some assistance, we are able to get up every hill under all conditions without experiencing any roller slip.

Yours faithfully,

(The above is reprinted from an actual letter in our files.)

4 UP ON A POWER PAK



REPRINTED FROM The Motor Cycle and Cycle

W. R. Walker, proprietor of the Hub Cycle Company of Kilmarnock Road, Newlands, Glasgow (seen steering the quad) who fitted the unit, claims 18 m.p.h. on the level with the machine as illustrated.

An Important Question

What is the cost of motorising your bicycle?

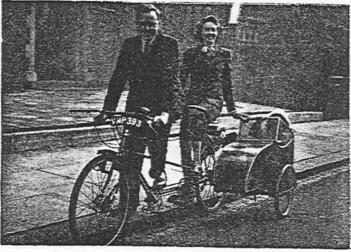
The price of the Power Pak 49 c.c. Hand Built Bicycle Motor is Terms are available. Road Fund Licence 17/6d. per year. Driving Licence is 5/- a year. Insurance from 12.6d. a year. Total running costs including petrol and oil will be less than 1d. per mile. The Power Pak 49 c.c. Bicycle Motor has no clutch—no chains no belts—no sprockets—no gears—therefore, motor maintenance is confined to normal de-carbonising.



BRITISH ENGINEERING

A bicycle motor is a joy as long as it works. If it is troublesome it becomes a liability. With a Power Pak you will have: "No starting troubles" and "No oiling plugs." You can depend on a Power Pak which is

BRITISH ENGINEERING AT ITS VERY BEST



371 MILES RUN COST 4/-!

Wishaw Man Did 250 Miles to the Gallon This week-end Mr. Robert MacIntyre, Russell Street, Wishaw, sets out on his return journey to Baldock, some forty miles from London. A Wishaw man, who was formerly employed at the cement plant, he has been working in the South for the past two years.

UNDER 24 HOURS

Recently he purchased a "Power Pak" for his Raleigh roadster cycle. On this machine he set out from Baldock to travel to Wishaw on holiday and accomplished the journey which registered 371 miles, in under 24 hours. This time includes stoppages on the road for meals. His machine ran magnificently.

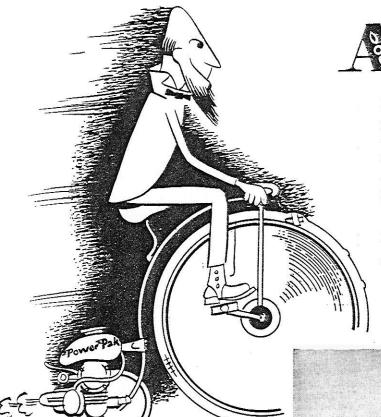
Prior to setting out on his long ride to "Bonnie Scotland" Mr. MacIntyre had only travelled some 250 miles with his "Power Pak" -a device which is petrol driven, and fitted to the rear wheel of the cycle. On his long ride he experienced no mechanical trouble despite the fact that the "L" is still carried front and rear.

RETURN "FARE"—UNDER 10;-

The run to Wishaw cost roughly about 4/- for petrol and with a similar outlay for the return run Mr. MacIntyre's trek to Scotland and back will cost well under the 10/- mark. Two or three similar runs, Mr. MacIntyre estimates, will fully repay him for his outlay on the "Power Pak." An experienced cyclist, he has great praise for the device, which cuts out strenuous pedal work. Without his "Power Pak" Mr. MacIntyre, who holds a disability pension from World War II, could not have undertaken such a long journey. The consumption of petrol is 250 miles to the gallon. Reprinted from Wishaw Press and Advertiser. 11th August, 1950.

To Work—a pleasure with Power Pak





Shown here is one of the first motor cycles produced in 1903.

Power Pak Aims

After years of study and experience the Power Pak bicycle motor was designed to incorporate the following features:—to fit any cycle or tandem in minutes—to be easy and effortless to operate—to give a really outstanding performance—complete simplicity of design and constant reliability.

POSITION

Firstly came the question of position. A front wheel position appeared to be impractical with our spirited unit.

A low mounting position beneath the bicycle frame seems only advisable in "clean" climates, as the motor is prone to dust and mud in this position.

A motor mounted between the frame does not appear to give a great measure of comfort to the rider.

The rear position was therefore chosen, and the Power Pak 49 c.c. motor was designed so that, apart from the very light petrol tank, the FULL weight of the motor is distributed BOTH SIDES of the rear wheel in a low slung position (as pannier bags on a motor cycle), making full advantage of the low centre of gravity, and yet still keeping it high enough to be unaffected by road dust an 1 mud. In this position the rider maintains perfect balance and stability of the bicycle when the motor is engaged or disengaged, and there is absolutely no "Tail Wag" when travelling at speed or when cornering. Furthermore, no part of the bicycle frame is stretched or strained in any way.

Since the year 1895, a great many attempts have been made to "Motorise" the bicycle. It was found, however, that the bicycle frame would not withstand the rather cumbersome motors of the day. The frame was subsequently strengthened and the great grandfather of our present-day Motor Cycle was born.

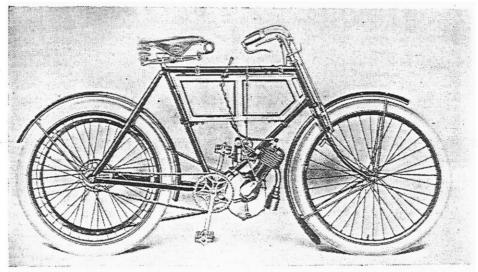
TE TO THE TENTH OF THE STATE OF

Scientific engineering developments have greatly improved the efficiency of modern "Small Motors," and in recent years a large number of manufacturers have again attempted to "Motorise" the bicycle. They were, however, faced with the identical problem as that of their predecessors, namely, to give a good performance and yet not "overpower" and thus ruin the bicycle.

It is true that, on the one hand, the stability of the bicycle had increased, but, on the other hand, the public's interpretation of a "good performance" had likewise increased.

Our own technical skill had therefore to match up with present day high demands.

Our success proves how well this has been achieved.



TYRE DRIVE and TYRE WEAR

TYRE DRIVE

As our primary aim was complete simplicity of design to give trouble-free riding, we chose a direct roller drive onto the tyre. This type of drive can be split into three classes.

- Where the roller is lifted on and off the tyre when in motion (causing a clutching action). The tyre may suffer wear however, caused by misuse of this action.
- Where the roller is held against the tyre with a spring pressure. Tyre wear may occur when the spring fails to hold the roller onto the tyre against the power of the motor, thus allowing roller slip. This is more prevalent in wet weather.
- Where the roller is heid in a "positive-locked" position, when the motor is engaged. In this way, the roller is held on the tyre at a constant pressure, rotating with the tyre in all weather conditions, with no roller slip.

IT IS THIS POSITIVE ROLLER DRIVE THAT WE HAVE CHOSEN

This is an important factor, as it will be appreciated that the actual contact of the driving roller with a tyre is similar to the contact between a tyre and the road. Such contact does not cause undue wear What does

cause it? In order not to have to constantly replace the driving roller, it is always made from a material which is harder than the tyre itself. If the method of attaching the motor to the bicycle is such, that the roller spins without driving the tyre, then "slip" occurs, with the driving roller acting as a grinding wheel and cutting the tyre.

The golden rule therefore, is that the driving roller must rotate the tyre at all times and under all conditions, as it is roller slip which is the cause of the trouble and not the fact that the tyre is being driven.

TYRE WEAR

When a motor is fitted to a bicycle regardless of the method of drive or the mounting position, some additional tyre wear occurs, caused by the thrust from the motor. Tyre wear depends on three factors.

- The type of tyre that you use. With the EVER-LAST tyre drive this should be a heavy tandem type, the tread of which runs around the tyre and not a studded tread. The tyre must be inflated very hard.
- 2. How you maintain and drive your bicycle.
- The greatest consideration, the type of bicycle motor that you fit, bearing in mind the detaile.: design of the driving roller itself.

F*E*S*T*I*V*A*L



.POWER PAK WON DOUBLE HONOURS

The Power Pak received double honours by being selected twice for the Festival of Britain and was exhibited at the South Bank Exhibition and the Land Travelling Exhibition. (Shown on right).

The Power Pak was selected as one of Britain's leading achievements for its high merit of functional engineering-quality of workmanship and material—design and value for money.



What the Trade Press Says . . .

The Motor Cycle and Cycle

TRADER

"A representative of 'The Trader,' with no previous tuition, rode in turn, two bicycles fitted with "Power Pak"

units and reports easy starting, smooth and vibrationless running, exceptional acceleration, a maximum speed of 30 m.p.h. and spirited hill-climbing. There was an absence of four-stroking at low speeds. climbing. There was an absence of four-stroking at low s THE POWER PAK unit is noteworthy for its clean lines. Because of the "pannier" mounting over the rear mudguard, with the cylinder fitted low on the offside, a low centre of gravity is obtained."



"Certainly the tyre seemed to suffer no harm whilst the outfit was in my possession: intentional abuse pro-duced neither slip nor undue vibration."

"The cyclemotor owner in using the "Power Pak" will, in my experience, be quite capable of incurring a summons for exceeding the speed limit in a built-up area!"....
'After riding the machine for many hours, I found that I had used

hardly any of the petrol and oil mixture which had been put into the

"At about seven m.p.h. pedalling speed, the motor cut in and carried on with the hard part of the work."....
"The 'Power Pak' does not detract from the distinguished appearance of a quality bicycle."...
"Note the rubber mounting of the work."

Note the rubber mounting of the unit and general accessibility."....

"Sound design and construction."

"Particularly good compression."

What is it then that recommends the Power Cycle?

The public has become educated to appreciate these remarkably efficient little egg-cup" units as the obvious and logical development of mechanical transport under conditions which exact the utmost economy in most aspects

of national life.

First it does not look like a motor cycle. There is no starter to kick. The whole affair can be carried upstairs or propped up in the passage. In other words, it is a motor vehicle which still remains a bicycle, and what's more, still keeps its pedals for use should the engine fail at any time, so that the owner does not feel that all is lost. And to the person who must paddle his own canoe, the ability to remove the engine altogether and yet continue to ride, is no mean consideration.

Reprinted from

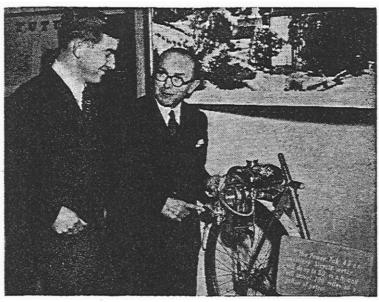
MOTOR YCLE

"A beautifully made unit."

No Oiling Troubles

A MOST SEVERE TEST

It has, till now, been generally accepted that a two-stroke engine always suffers from "oiling plugs," usually caused by too much oil reaching the cylinder head. To prove how successfully the Power Pak Decompressor Valve ejects surplus oil, the Silencer was removed and the Piston placed at the top of its stroke. A tablespoonful of neat engine oil was poured into the Cylinder Barrel and allowed to drain and settle inside the cylinder head, filling it and completely covering the sparking plug. silencer was replaced, the bicycle mounted, and the Power Pak sprang to life after only six yards of pedalling.



Method of Drive

There are various methods of transmitting the power of the engine to the bicycle. Among these are: Belt Drive, Chain Drive and Wheel Spindle Drive. In all these methods a clutch is necessary, also in some cases, a sprocket is attached to the spokes of the rear wheel.

It is generally accepted to be unsatisfactory to use the existing bicycle chain to transmit the power of the motor, as this chain has not been designed for such use.

Every different make of bicycle motor has its own detailed design. It is, therefore, incorrect to suggest that all "chain drives" are bad. It is equally incorrect to suggest that all "tyre drives" are good. Each motor must be judged on its merits.

If the particular design of the motor is such that the additional tyre wear is reasonable, then by the mere fact of dispensing with all other potential trouble-makers, this design is satisfactory.

TESTING ROLLER SLIP

Firstly, check that the motor is correctly fitted. Engage the motor into its driving position. Place the throttle control in the full throttle position. Lean heavily on the bicycle and push slowly forward. This action should cause the driving roller to "revolve" the motor without any "roller slip" whatsoever. The driving roller should turn with the tyre even when the tyre is thoroughly wet. The higher the compression and power of the motor, the more severe is the test, and more effort will be needed.

Half a million Riders can't be wrong

Conditions have been studied in Europe, where it is estimated 500,000 cycle motors are in use and it has been generally accepted there by the largest manufacturers, that the best method of drive and the cheapest to maintain is a direct roller drive onto the tyre. They claim with a POSITIVE tyre drive, tyre wear is no greater than with any other type of drive.

The reason for this unanimous choice is twofold. Firstly, with this type of drive, the possible replacement of chains, belts, clutch parts and sprockets is completely eliminated. Secondly, the motor is insulated from driving shocks and snatch, as it has the benefit of having 60 lbs. per square inch of air pressure between itself and the driven wheel. This insulating barrier affords the motor a cushioned" drive, adding to its

BAD WEATHER

Does not affect the Power Pak Engine

The illustration shows a hose playing on a Power Pak engine while it is running proving that it is unaffected by rain and functions perfectly in all weathers, even snow.

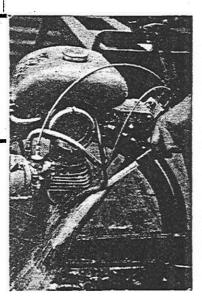
ENGINE DATA

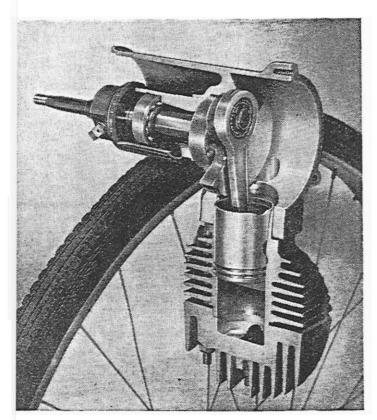
Single cylinder-two-stroke-petroil driven

Bore-39mm. Capacity-49 c.c. Revs. — 3,000 r.p.m. Normal Weight-22 lbs.

Fly-wheel magneto. 14mm. plug. Needle type carburettor complete with air filter.

Petrol consumption-200/240 m.p.g. Tank capacity-1 gallon plus.



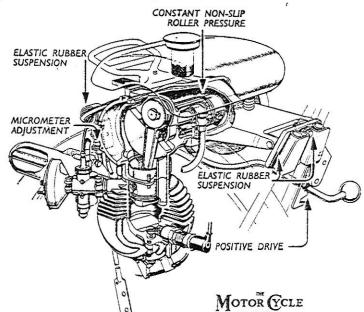


An " exploded " view of the Power Pak showing the extreme simplicity and excellent Bearing arrangement of the motor.

SIMPLICITY

The Power Pak engine consists of a Crankshaft Assembly and a Piston/Conrod Assembly. It is not possible to make a petrol engine simpler than this. The magneto, plug, carburettor, and silencer are immediately accessible and are unaffected by rain or dust. Nothing has to be "taken to pieces" to make any adjustment.

The bearing arrangement (which is a most important factor in an internal combustion engine) is more than ample, as oversized bearings are used throughout. Furthermore, these bearings are completely enclosed within the housing of the Crankcase and again covered by the driving roller. When the driving roller is removed the complete housing is found to be free from dirt. With the use of stout oilseals, the Bearings are at all times segregated from ALL contact with damaging grit, etc. The bearing layout is excellent, as it will be seen that the main bearing is positioned directly over the tyre, thus taking the full driving load.



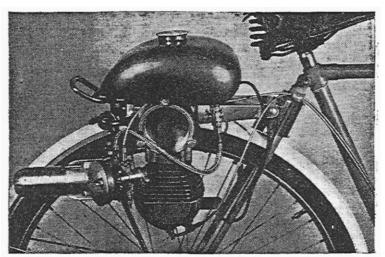
FIRST SHOWN AT THE

COURT EARLS SHOW

AFTER BEING EXHIBITED TWICE AT THE FESTIVAL OF BRITAIN

THE 1952





THE HAND BUILT BICYCLE MOTOR WITH A DOUBLE

Guarantee

A FULL YEAR GUARANTEE PLUS THE EVERLAST TYRE DRIVE

THE NATION'S

FEATURING

● NEW PETROL TANK ● NEW "EVERLAST"

DRIVING ROLLER ● NEW DECOMPRESSOR

ADJUSTER ● NEW NON-FLOOD CARBURET
TOR ● SEVERAL ACCESSORIES NOW

AVAILABLE

25 Guineas (TERMS AVAILABLE)

CHOICE YOUR CHOICE

GREAT CLAIMS

We have indeed made some great claims for our motor. This is not just "paper talk." Ask your dealer for a demonstration today, and judge it on its merits. Remember the Power Pak detailed design is unique, and should not be confused with any other motor. In closing, may we thank you for reading the "Power Pak News." Become the owner of a Power Pak Bicycle Motor, and you will thank us, as it is our policy to sell through selected and appointed dealers, who will give you "individual" attention and service.

Sole Concessionaires:
MESSRS. SINCLAIR GODDARD & CO. LTD., 162, QUEENSWAY, LONDON, W.2. (opposite Whiteleys) Telephone: Bayswater 6257.

"EVERLAST"

TYRE DRIVE Guarantees

THOUSANDS OF MILES PER APPROVED TYRE

The "Power Pak" 49 c.c. Bicvcle Motor, is the only Motor fitted with the Everlast Tyre Drive. This patented drive, with its micrometer adjustment and elastic rubber suspension, maintains positive, con-stant, non-slip roller pressure, completely eliminating tyre wear caused by slip. The Everlast Tyre Drive does not contain any springs, is simple and robust, and needs no attention, and does not incorporate a "tyre clutch." The Everlast Tyre Drive is the positive answer to tyre wear, as there is no slip under any conditions and will give thousands of miles per approved tyre. There is no per approved tyre. tyre wear problem with the Ever-last Tyre Drive. This has been proven by thousands of users.

STOP **PRESS**



DEALER'S NAME

HEN. 1004