1910 Royal Enfield Brochure

ROYAL ENFIELD Motor Cycles.

THE ROYAL ENFIELD MOTOR CYCLES

are entirely worthy of the Royal Enfield name and the motto "made like a gun"—with which the bicycles that bear it have been so long identified.

They have been introduced to meet the constantly increasing demand for a really light-weight bicycle of the highest possible efficiency.

The specifications given on the following pages will furnish the reader with the fullest information as to their construction and equipment, hence we shall only make passing reference to a few of their leading features here, devoting the balance of our space to a full and detailed statement as to the best methods to employ in the handling and care of the machine.

One of the features to which we would draw special attention, is the Royal Enfield Spring Forks. These are so designed as to overcome all vibration arising from irregularities in the road surface, and thus entirely free the rider from the inconvenience and discomfort which they must otherwise experience.

Another feature is the all-round simplicity of the machine—in both starting and control it has no equal in this direction, and the details throughout are so simplified, as to enable the veriest novice to ride it with perfect confidence, after a few minutes instruction.

Its silence, its economy in petrol and oil consumption, and its exceptional power, are other advantages which must appeal, and a rider up to 14 stones can easily obtain an average speed of twenty-five miles an hour, while on a "give-and-take" road, any speed from 4 to 35 miles can be attained at will.

TESTS AND ADJUSTMENT.

The Enfield Motor Cycle is thoroughly tested and adjusted before leaving the works; each complete engine equipment has satisfactorily passed a severe road test, and the machine, on delivery, is ready for immediate use.

TO START THE ENGINE.

Jack up the machine on the back stand, and fill up the tanks as indicated on the fillers, viz:—petrol in the main tank, oil in the left forward tank, and paraffin in the right forward tank. Use a funnel fitted with fine mesh wire gauze to avoid the possibility of dirt or chips entering the tanks. This is important and if neglected may cause trouble in the pipes.

LUBRICATION.

Lubricate the bicycle in the ordinary way, and the engine as follows:—Open the tap at the bottom of oil pump (open when lever is in horizontal position) and inject two full measures of oil, being careful to draw the pump slowly to ensure taking full measure, and to inject slowly, which will avoid the possibility of straining joints. Then close the tap.

INJECTION OF PARAFFIN.

Inject two pumpfuls of paraffin into cylinders (the tap on pump is open when the lever is in a horizontal position, as also are the taps for compression). Care must be taken to close these taps before starting the engine.

FLOODING THE CARBURETTOR.

Open the petrol tap (which is open when the lever is in vertical position), flood the Carburettor by pushing down the knob on top, advance magneto to nearly full, and open throttle to about three-quarters. Raise the valve lifter to full extent, pedal machine a few revolutions quickly, and drop the valve lifter. The Engine should then start at once.

THE WORKING OF CONTROL LEVERS.

It is very necessary that the rider should acquaint himself with the results obtained from the working of the Control levers while the machine is on the stand. This will often save considerable trouble in manipulating the bicycle on the road, and especially in traffic. It is possible for the engine to run so slowly without mis-firing as to make only four miles per hour on the road.

THE UP-KEEP OF ENGINE.

This is a most important item. Use only the best oil. We strongly recommend the oil we use ourselves, and which may be obtained from our accredited Agents throughout the kingdom. A charge is required about every five miles until the engine has run about 300 to 400 miles when this may be increased to every eight or ten miles. Do not give two charges under the impression that it will suffice for ten miles, or you will be in trouble at once, because in this case the engine is at one time over lubricated (and the oil may be ejected past the piston rings) and later under-lubricated, causing over-heating and carbonization, and often seizure of a bearing.

AFTER A DAY'S RIDE

drain off the dirty oil from the crank case and swill out with paraffin. To do so, open the tap in the bottom of the crank case to draw out the oil, and unscrew the nipple at end of oil tube and inject the paraffin with an oil can. It is also necessary to drain off a small quantity of petrol through the tap underneath the filter to remove any impurities which may have washed through the tank.

DO NOT FORGET

to oil the bicycle and magneto as well as the engine. The magneto must be oiled with good cycle oil.

Two measures of paraffin injected into cylinders overnight will often save time and hard work in the morning, especially in winter.

POSSIBLE CAUSES OF UNSATISFACTORY RUNNING OF ENGINE.

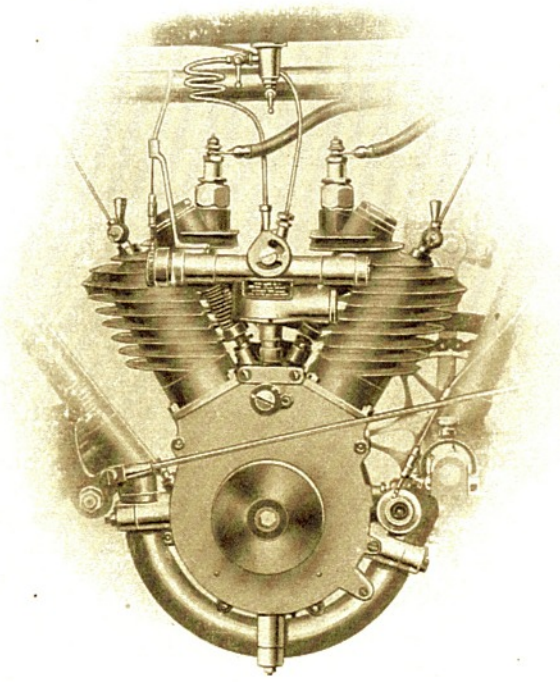
In looking for these, see that one part is fixed up again before interfering with another.

See that the petrol supply is efficient to the Carburettor, if not, the supply pipe may be choked ; disconnect the pipe at Carburettor and turn on petrol, and if none comes through, disconnect the pipe at filter and clean.

This may be accomplished by blowing through the pipe, or with copper wire. It is very seldom that impurities will get into the Carburettor, but if such occurs disconnect and wash out with petrol. (*See Carburettor.*)

THE PLUGS.

The plugs may be sooted. Clean with petrol, and see that points are so adjusted as to allow of an ordinary visiting card passing between them. Plug may be broken, if so it must be replaced with a new one. In refixing the plugs it is essential that they should be screwed tightly up to the seating, and an asbestos and copper washer used to ensure a tight joint.



The above illustration will be useful to the Rider when perusing hints on adjustments, etc.

THE VALVE STEMS may become dirty, if this cannot be remedied by paraffin, take them out and clean with fine emery cloth (No. 00).

GRINDING THE VALVES. The inlet and exhaust valves need grinding into their seatings occasionally, otherwise there will be a loss of compression. Use flour emery for the inlet valves, and 220 emery for exhaust, finishing with flour emery.—The method is as follows—

Remove the cotters, caps and springs, mix the emery with thin oil, and apply to the valve face: give rotary movement first clockwise and then anti-clockwise, but do not give the movement in one direction more than 3 or 4 times. The movement may be given with either a screw-driver or better with a small hand brace with screw-driver bit; lift up the valve from the seating after each few revolutions. Continue until the faces are smooth, then clean away all the emery with paraffin and re-fix the valves.

NOTE.—The above operation can be better carried out if the cylinder is removed. Great care should be exercised that no emery enters the cylinder, and it is important that the former should be entirely cleaned away before the latter is replaced.

THE CARBURETTOR is always delivered perfectly adjusted, and breakdowns in this direction should be exceedingly rare. If it is necessary to interfere with it, great care must be used in handling. Proceed as follows—

Uncouple the pipe and unscrew large locking ring under Carburettor, when the inside will come away bodily. Do not detach the float or alter the petrol lever, but clean out the chamber with petrol, and gently pull the valve spindle into its seat, at the same time turning it so as to grind away any deposit or dirt which may have got into the valve seating. The cause of flooding is almost invariably due to grit between the needle valve and its seating. Wash out well with petrol finally. It is most important that the seating between the top and bottom halves of the float chamber should be perfectly clean, and when re-assembling, the two halves must be placed into position together. After cleaning, re-assemble carefully and replace.

It is likewise requisite to take all necessary precautions to avoid displacing, or bending the spindle on which the float moves in the constant level chamber, and never to touch the small nut fixed on this spindle for fear of disturbing the regulation of the petrol level, which must always remain $\frac{1}{2}$m/m beneath the upper edge of the constant level chamber.

The carburettor is provided with an extra air regulator, and, as a matter of principle, there is no need to interfere with it when the mixture has been once regulated, this regulation being provided only for the purpose of obtaining the maximum yield with the greatest variations of temperature and density of spirit used.

FINALLY. We shall be pleased at all times to reply to any queries anent the running and upkeep of the Enfield, and additionally, the rider will find Enfield Agents in almost every town and village in the kingdom who will always interest themselves in the Bicycle that is "made like a gun."

LONDON:
48, HOLBORN VIADUCT.

ENFIELD CYCLE Co. Ltd., REDDITCH.
(Contractors to H.M. Government.)

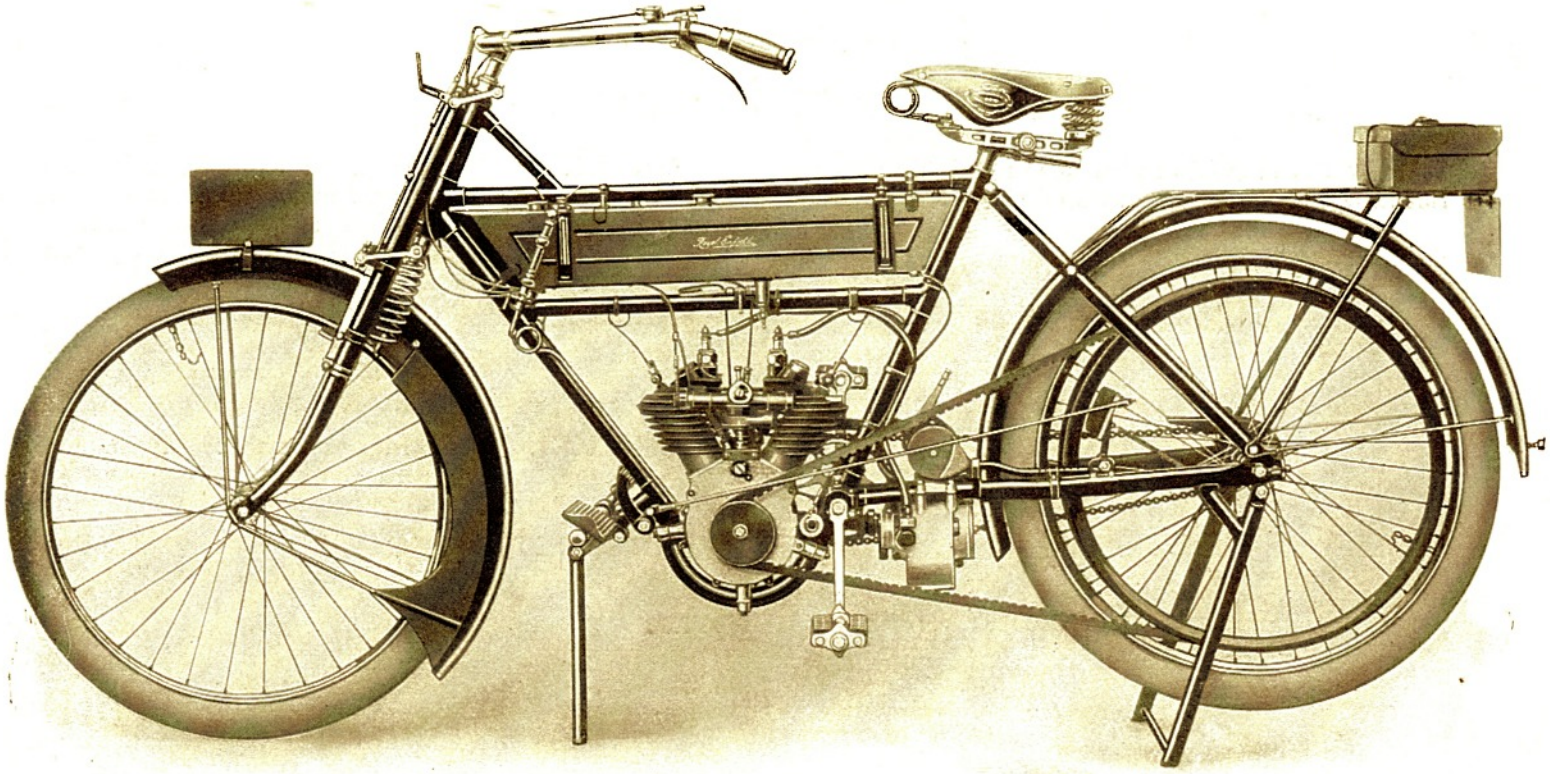
The Royal Enfield 2¼-H.P. Lightweight Motor Bicycle.

MODEL No. 140.

SPECIFICATION.

FRAME.	19½in., of exceptionally strong design, fitted with foot rests and spring forks.
WHEELS.	26in. × 26in.
TYRES.	Continental Motor Cycle, 26in. × 2in.
MUDGUARDS.	Specially designed, extra strong and wide, with front extension and side shields.
CARRIER.	Exceptionally strong and light, fitted with large square tool bag, containing full kit of tools in leather roll-up.
STANDS.	Back and Front—the former fitted to fork ends, and when not in use secured to mudguard by efficient spring attachment.
NUMBER PLATES.	Back and Front of good size.
BRAKES.	Powerful front rim actuated from handle-bar—Rear pedal brake operating from lug on frame and acting on Belt rim.
SADDLE.	Lycett's L77 Motor Cycle Saddle.
FINISH.	Frame parts cozlettized and enamelled stone color or black to order, tank panelled and lined — front wheel plated, with enamelled centre, back wheel enamelled all over.
ENGINE.	Royal Enfield Twin Cylinder, "V" pattern, bore and stroke 52 × 70m/m producing 2¼ H.P. — mechanically operated valves (interchangeable).
IGNITION.	Magneto, shaft driven, most accessible, and protected from wet and mud by aluminium case.
CARBURETTOR.	Specially constructed and semi-automatic, very economical and easy to manipulate.
PETROL CONSUMPTION.	100 miles to gallon.
TANK.	Very strong—3 compartments (petrol capacity, 8½ pints—oil, 1½ pints—paraffin, ½ pint), fitted with oil and petrol gauges, inclined pumps and large fillers. All outlets for petrol, oil, and paraffin, are covered with fine mesh wire gauze.
TRANSMISSION.	⅝in. "V" Belt on deep section pulley—belt rim securely laced to wheel, ensuring perfect truth.

Weight—Completely equipped as above, about 100 lbs.



ROYAL ENFIELD LIGHTWEIGHT MOTOR BICYCLE.

Model No. 140.

The Editor "BICYCLING NEWS" writes—"The Enfield Motor Bicycle is a gem of neat design—as dainty and complete a little mount as one could wish for."

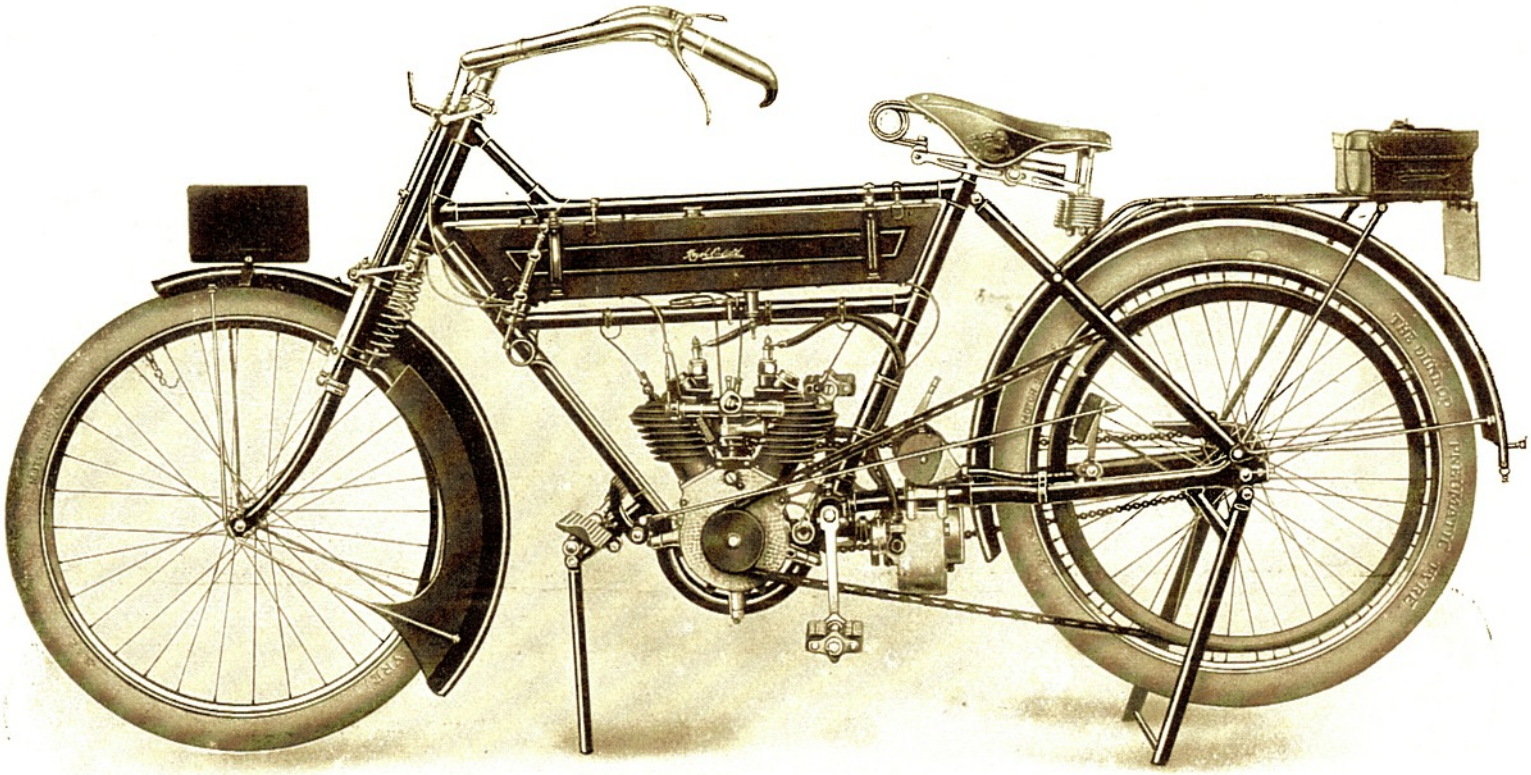
The Royal Enfield 2¼-H.P. Lightweight Motor Bicycle.

MODEL No. 145.

SPECIFICATION.

FRAME.	19½in., of exceptionally strong design, fitted with foot rests and spring forks.
WHEELS.	26in. × 26in.
TYRES.	Palmer or Dunlop Motor Cycle Tyres 26in. × 2in.
MUDGUARDS.	Specially designed, extra strong and wide, with front extension and side shields.
CARRIER.	Exceptionally strong and light—fitted with large square tool bag, containing full kit of tools in leather roll-up.
STANDS.	Back and front—the former fitted to fork ends, and when not in use secured to mud-guard by efficient spring attachment.
NUMBER PLATES.	Back and front, of good size.
BRAKES.	Powerful front rim actuated from Handle-bar. Rear pedal brake operating from lug on frame and acting on Belt rim.
SADDLE.	Brooks' B120/2.
FINISH.	Frame parts cozlettized, and enamelled stone color or black to order, tank panelled and lined, front wheel plated, with enamelled centre, back wheel enamelled all over.
ENGINE.	Royal Enfield Twin Cylinder "V" pattern, bore and stroke 52 × 70 m/m producing 2¼ H.P. — mechanically operated valves (interchangeable).
IGNITION.	Magneto, shaft driven, most accessible, and protected from wet and mud by aluminium case.
CARBURETTOR.	Specially constructed and semi-automatic, very economical and easy to manipulate.
PETROL CONSUMPTION.	100 miles to gallon.
TANK.	Very strong—3 compartments (petrol capacity, 8½ pints—oil, 1½ pints—paraffin, ½ pint) fitted with oil and petrol gauges, inclined pumps and large fillers. All outlets for petrol, oil, and paraffin, are covered with fine mesh wire gauze.
TRANSMISSION.	⅝in. "V" Belt on deep section pulley—belt rim securely laced to wheel, ensuring perfect truth.

Weight—Completely equipped as above, about 100 lbs.



ROYAL ENFIELD LIGHTWEIGHT MOTOR BICYCLE.

Model No. 145.

Mr. F. SANDERS, Worcester, writes—" I am delighted with my Enfield Motor Bicycle, it is thoroughly efficient, and has never given me the slightest trouble."

Praise from Press and Public.

Motor Cycle :—	"The Enfield Motor Cycle is one of the most serviceable machines in the Stanley Show."
Motor Cycling :—	"All the leading features of the Enfield are well up-to-date."
Irish Cyclist :—	"The Enfield is of the highest efficiency and reliability."
Scottish Cyclist :—	"The Royal Enfield Motor Bicycle is strongly constructed on substantial lines."
Clarion :—	"The Enfield is elegant, economical in petrol consumption, and exceptionally easy to manipulate."
Mr. S. Chas. Perryman, Handsworth :—	"I find the Enfield Lightweight perfect in running and well designed. It is delightful in traffic, and quite sufficiently fast on a level country road, whilst the power on hills is remarkable."
Mr. John Frame, Glasgow :—	"I must say my Enfield is a "Dandy"; takes the hills like a bird and has a good turn of speed."
Messrs. W. L. Thompson, Ltd., Hull :—	"We must congratulate you upon having one of the smartest lightweights at present on the market — you are bound to do well with this."
Mr. W. Urry writes :—	"After an every-day experience of the Enfield Motor Bicycle for several weeks, I have much pleasure in stating that the machine has given me every satisfaction. For a lightweight of 2¼-H.P. it is a wonderful hill climber, very economical in petrol consumption, speedy, and in every way an ideal little mount.

OUR GUARANTEE.—

Should any part of a Royal Enfield Motor Bicycle become defective within six calendar months from date of purchase, we undertake to replace the same, provided such defective part is sent to us Carriage Paid, and an intimation from the sender, that he desires it replaced or repaired under this Guarantee.

We do not guarantee the specialities of other firms, such as tyres, saddles, etc.

We give this guarantee instead of the guarantee implied by statute or otherwise as to the quality or fitness of our machines for the purpose of motor cycling; any such implied guarantee being in all cases excluded. Any damages for which we make ourselves responsible under this guarantee, are limited to the replacement of any part which may have proved defective.