



# The Morris-Oxford Light Car.

1914



1914

Manufacturers: **W.R.M. MOTORS, LTD.,**

THE COWLEY MOTOR WORKS,  
COWLEY, - near OXFORD.

*Codes: A1 A.B.C. (4th & 5th)*

*Engineering (2nd edition) Liebers, Western Union.*

*Telegrams and Cables:*

*"VOITURETTE, GOWLEY—OXON."*

*Wholesale and Shipping Agent:*

**W. H. M. BURGESS,**  
40 GLASSHOUSE STREET, LONDON, W.

*Telephone: 590 Oxford.*





## The Morris-Oxford Light Car.



In competition at Caerphilly Hill Climb.



# The Morris-Oxford Light Car.

## FOREWORD.

**M**ESSRS. W.R.M. MOTORS, LTD., consistent aim has been to produce a car of low price to meet every requirement of the most discriminating buyer. Quality is their first consideration—good materials in the construction of a car mean efficiency and durability in the working—careful design, by practical men who are also users with years of road experience do undoubtedly help to eliminate all those small annoyances which are so often found on cars. Accessibility has been carefully studied, and is beyond reproach; every part of the Morris-Oxford Car is purchased from Specialists and assembled in our own Works under the careful supervision of Experts, after first undergoing rigid tests for accuracy in every detail; the result is a car of super-excellence at a moderate price.

The price paid for good material which in our case is always the highest price, is bound to prove finally to be an investment yielding interest, because the car lasts very much longer and requires little or no repairs, as it bears the names of many firms of high repute in the Automobile industry, and backed by our reputation acquired by careful study of the users' requirements, the great question of depreciation becomes almost nil. To dwell in detail on all the notable features of our car would involve much repetition concerning the care taken in every process, and through all the stages of manufacture, so it must suffice to say that the best materials obtainable are used in its construction.

Those who have been conversant with our car during 1913 will not find any radical change in design in the following pages, not that we would discourage innovation, as every modification or change that promises for the better receives most careful consideration, but we will not make changes for the sake of coming into line with others, after having produced in the previous year a car which has proved so successful from every point of view. It must not however be imagined that we are reposing on a reputation gained from past achievement; we realise that the keenness of modern competition must be dealt with in one of two ways, namely—by a reduction in price, or by improvement in the hundred and one details of a car and increased value—and we feel confident we are right in choosing the latter, therefore your careful perusal of the following pages is bound to repay you, and furthermore, the whole of the reading matter has as far as possible been couched in non-technical terms.





## The Morris-Oxford Light Car.

10 h.p. DE LUXE MODEL. 190 Guineas.



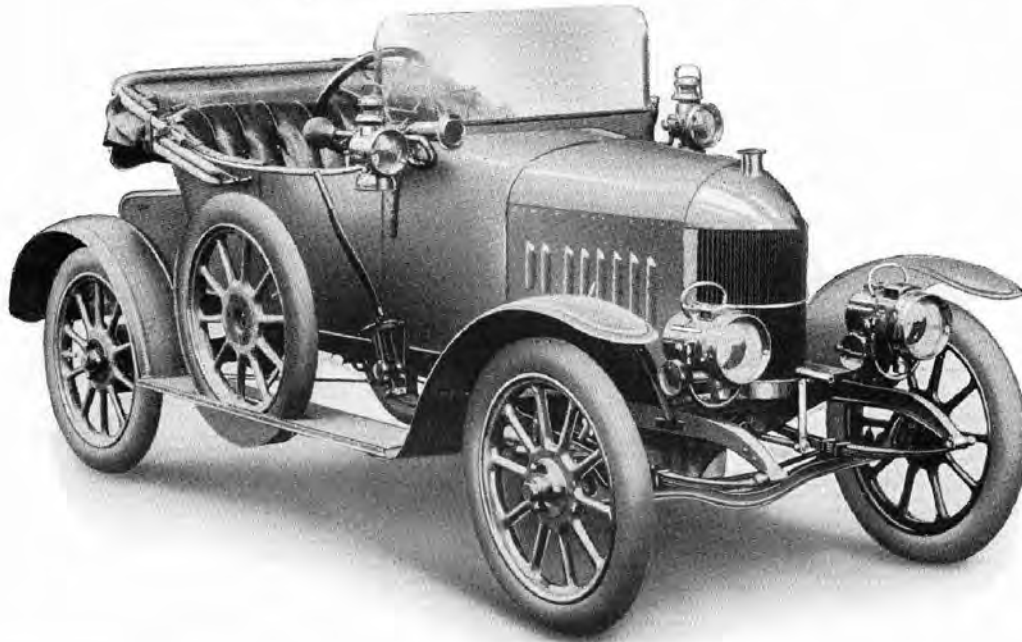
Complete, as above, painted dark green or grey, including Hood, metal Wind Screen, 5<sup>best</sup> English Lamps, Horn, spare Wheel and Tyre, Tool roll and Tools, Jack, Pump, Oilcan. **190 Guineas.**

*CODE WORD:* **UNIVO.**



## The Morris-Oxford Light Car.

10 h.p. DE LUXE MODEL. 190 Guineas.



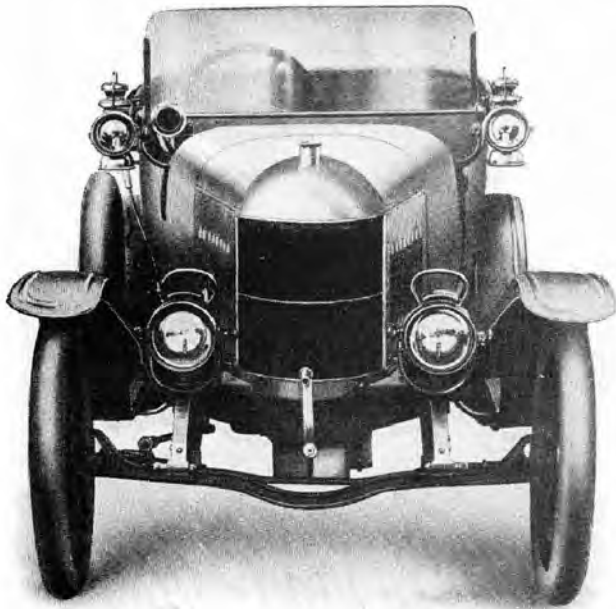
Side view of De Luxe Model. Complete Price 190 Guineas, including all fittings as illustrated.





# The Morris-Oxford Light Car.

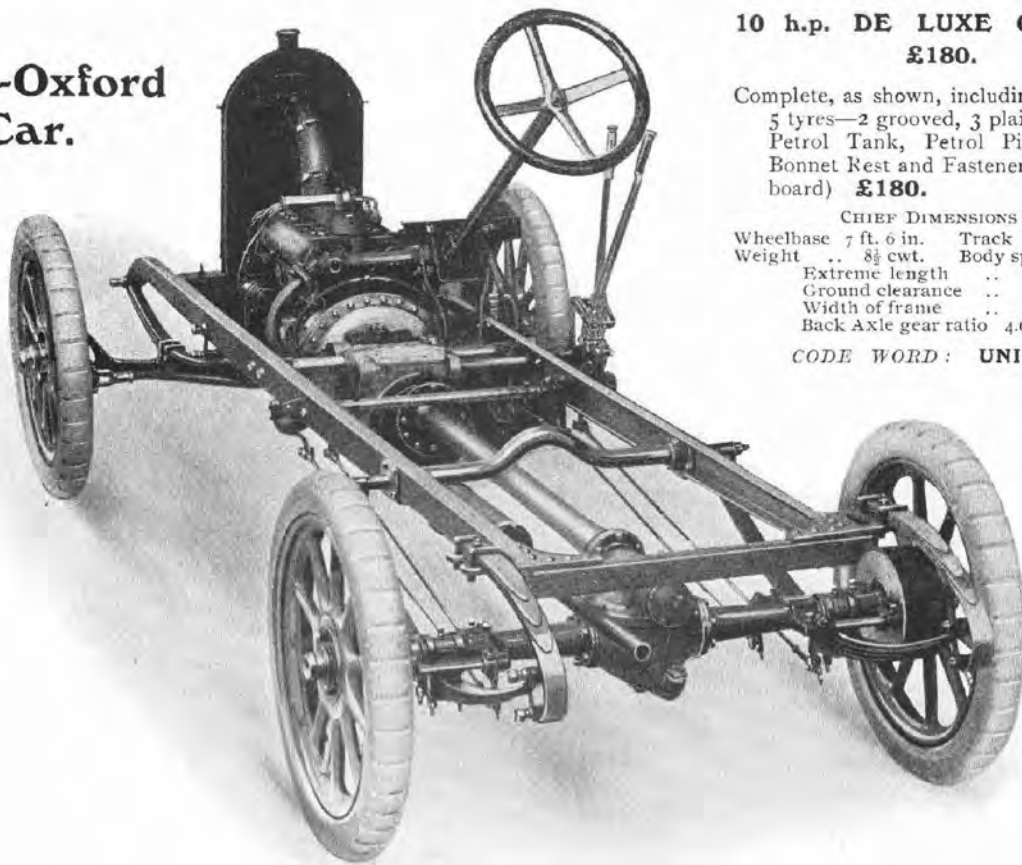
10 h.p. DE LUXE MODEL. 190 Guineas.



Further illustrations of De Luxe Model.



# The Morris-Oxford Light Car.



**10 h.p. DE LUXE CHASSIS.  
£180.**

Complete, as shown, including 5 wheels,  
5 tyres—2 grooved, 3 plain, Tool Kit,  
Petrol Tank, Petrol Pipe, Bonnet  
Bonnet Rest and Fasteners, (no Dash-  
board) **£180.**

**CHIEF DIMENSIONS:—**

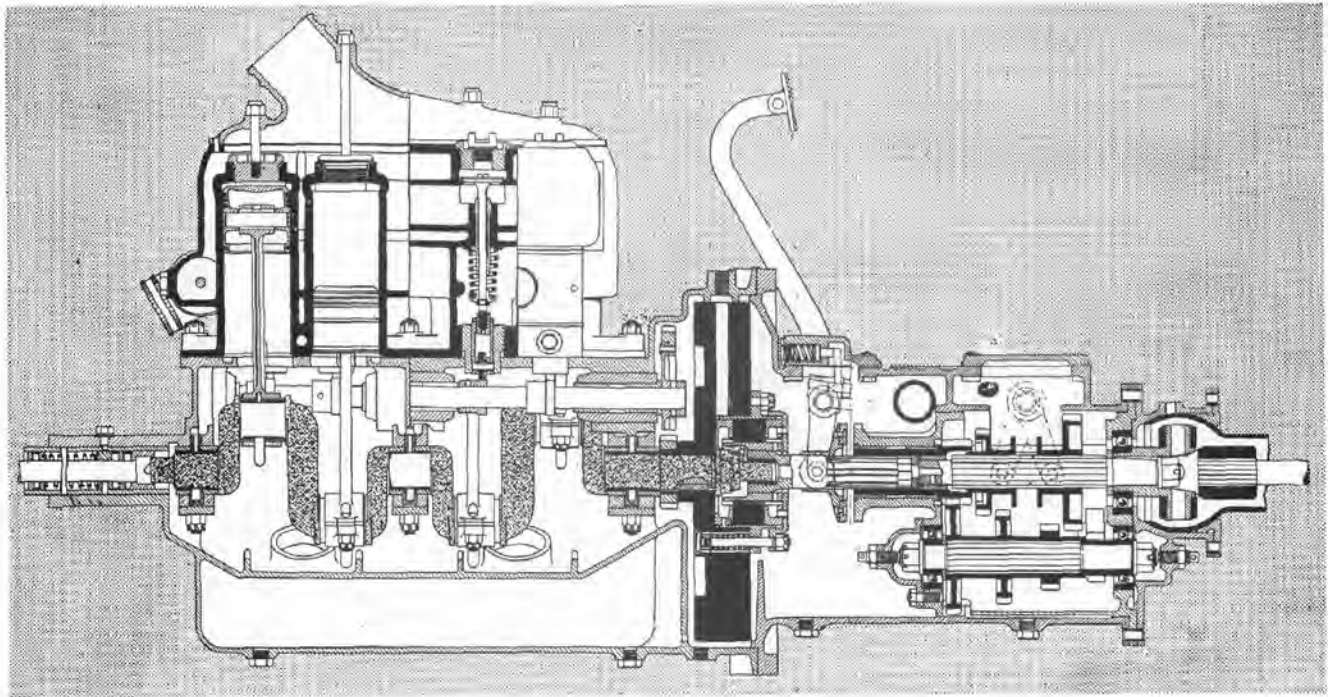
Wheelbase	7 ft. 6 in.	Track	.. 3 ft. 9 in.
Weight	.. 8½ cwt.	Body space	5 ft. 4 in.
Extreme length	.. 11 ft.		
Ground clearance	.. 8½ in.		
Width of frame	.. 2 ft.		
Back Axle gear ratio	4.6 to 1.		

**CODE WORD: UNIVASS.**





## The Morris-Oxford Light Car.



Sectional elevation of complete power-unit, as fitted to both De Luxe and Standard models.





# The Morris-Oxford Light Car.

## SPECIFICATION OF DE LUXE MODEL 10 h.p.

**Engine.**—10 h.p. specially designed **White & Poppe 4 cylinder water cooled** of high efficiency and made exclusively for us. 60 m/m bore, 90 m/m stroke, capable of running at high speeds without vibration, special attention having been paid to balance. Cylinders are cast en bloc, with inlet and exhaust manifolds cast integral with same, the exhaust being water cooled. Valves are arranged on either sides of the cylinders and are of exceptionally large diameter, they are operated by adjustable tappets which have fibre inserted, the whole being covered in by aluminium coverer plates, easily detached, thereby silence is ensured. The crankshaft runs in white metal bearings of generous proportions backed with bronze bushes, the connecting rod big ends are similarly treated. The pistons have five rings fitted, one being used to prevent any possible side movement of the gudgeon pin. The timing gear wheels are situated just immediately forward of the fly-wheel from which they obtain a copious supply of oil, and having accurately cut teeth are quite noiseless. The bottom half of the crankcase is detachable to allow of inspection or adjustment. Government tax £3 3s. 0d.

**Gear Box.**—This is bolted on to the fly-wheel casing and together with the clutch, which is housed in the centre of the flywheel, completes the unit system of construction of the whole **power plant**, comprising engine, clutch, gear box, universal joint and spherical housing for torque tube. Three speeds and reverse are provided of the sliding type, they are operated by the usual side lever working in a gate, the lever is hinged at the bottom to enable it to operate the arrangement of selector springs which lock the respective gears, this arrangement is delightfully easy and smooth to manipulate. The gear wheels are mounted on short stiff castellated shafts which rotate on annular type ball bearings. Special attention has been paid to the design of this gear box to aid the easy removal of same from the power unit without disturbing other parts, by the simple method of carrying the gear shafts on a shell or cartridge which is inserted at the back end of the power unit and is flanged to allow it to be bolted to the back of the outer casing of unit and the same bolts are also adapted to hold the spherical housing which carries the torque tube and forms the back cover of the gear box, thus completing the power unit, which is carried in the chassis by three point suspension. A large cover is fitted at the top for inspection of gears, this is quickly detachable. Lubrication is carried out by the fly-wheel, the gears using the same oil as the engine. (*See Lubrication*).

The gear ratios give the following speeds: 1st speed  $5\frac{1}{2}$  miles per hour at 1000 revolutions per minute.

2nd speed	$10\frac{2}{3}$	„	„	„	1000	„	„
3rd speed	$17\frac{1}{3}$	„	„	„	1000	„	„

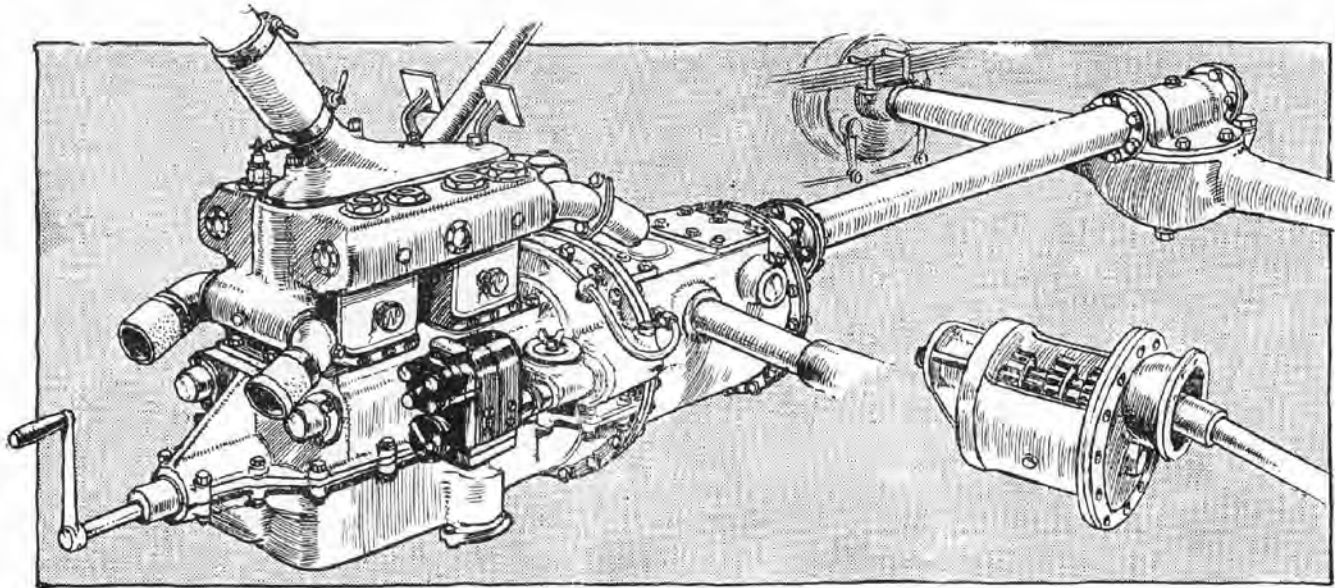
**Clutch.**—This is of the latest pattern multiple disc type, situated in the centre of the solid steel engine fly-wheel, it is composed of thirty-six alternate plates of hardened steel and bronze, provision for adjustment of spring pressure is made. A clutch-stop is also provided. The abnormally smooth action of this clutch has to be tried to be fully appreciated.

**Lubrication.**—Is carried out by the flywheel, which when rotating acts like a centrifugal pump as all the oil in the engine, clutch case and gear box gravitates to the bottom of the fly-wheel pit, where it is picked up by the fly-wheel and distributed under





## The Morris-Oxford Light Car.



The Morris-Oxford engine and transmission. Detached is the shell, carrying the gears, clutch-stop and half of the socket for the spherical head of the propellor-shaft casing.

Above arrangement is common to both Standard and De Luxe Models.



# The Morris-Oxford Light Car.

SPECIFICATION.—*continued.*

considerable pressure through pipes of large diameter to the various points of application, so a constant circulation is kept up. A level indicator is provided on the left side of the crankcase to show at a glance the amount of oil in the sump. Sufficient oil is carried in the sump for 200 miles without replenishment.

**Ignition.**—By high tension variable magneto of latest type, water and dustproof, the wiring neatly arranged, the four high wires being tension carried in an aluminium tube; the switch is fixed in a convenient position on the dashboard.

**Carburettor.**—This is the well known **White & Poppe float feed**, entirely automatic at all engine speeds, quick to accelerate and gives good petrol consumption and slow running. The throttle is controlled by accelerator plunger pedal only, and it can be set to any degree of opening by half a turn of the accelerator plunger without the driver leaving his seat.

**Transmission.**—By propellor shaft, which is enclosed in a rigid torque tube. Only one universal joint is provided, this is of the ring type of large size, it is oiled very efficiently from the gear box due to the main shaft from gear box being hollow; the whole universal joint runs inside the ball shape head of the torque tube, thus fully protected from dirt and wet. The torque tube head pivots in its spherical housing which is bolted to the back of the gear box, thus performing the dual function of torque and radius rods. The propellor shaft inside takes the power from the universal joint by castellation, and has the worm for back axle drive at the other end. The whole combined arrangement with engine and gear box forming an entirely dust-proof and water tight drive throughout the whole transmission.

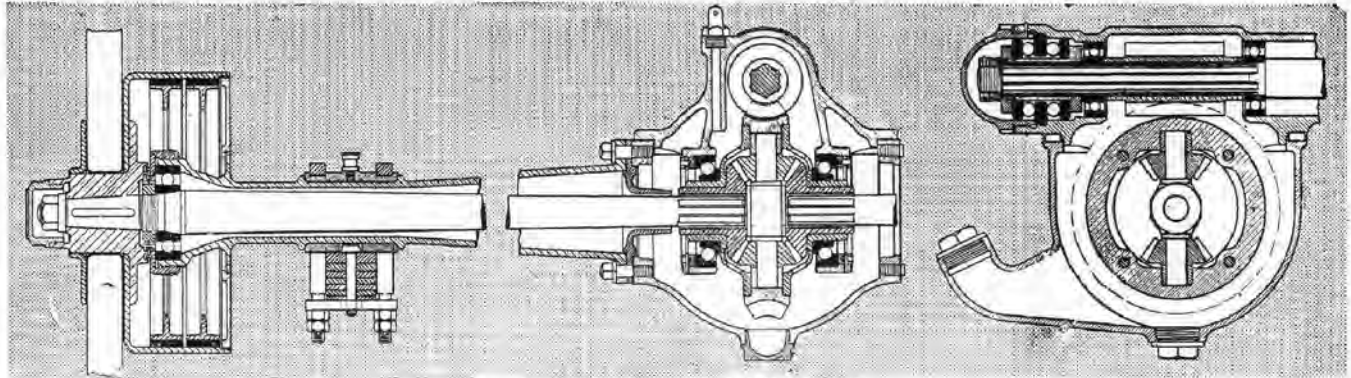
**Rear Axle.**—This is of the built-up type giving lightness and rigidity, consistent with strength, the axle tubes being tapered and of forged steel, bolted to the centre casing which carries the worm drive of latest design and very high efficiency, ball bearings throughout, with large ball thrusts where necessary. The differential gear is of the two pinion bevel gear type. Large filling orifice is provided at the back of axle casing to enable oil to be easily added. This orifice is plugged with a screw cap and acts as an oil level indicator, a draw off plug is fitted at the lowest point of the axle casing, an airvent plug is inserted at the top of casing to assist cool running; ample provision of guard washers are fitted at both ends of axle shafts to prevent oil leaking out on to wheels and brakes. The axle shafts are castellated to provide the drive from the differential.

**Front Axle.**—One piece drop forged H section steel, the swivel axle arms are provided with ball thrusts, the swivel axle arm pins are carefully hardened and ground and drilled hollow for free passage of grease from the screw down grease cup fixed at the top. The steering arm, which connects by ball joint coupling rod to steering gear, is arranged to travel above the axle thus ensuring the safety of this vital part under the worst conditions. The wheel hubs run on ball bearings and are provided with a special form of safety cage which would prevent the wheel coming off even in the rare event of the ball races breaking up. Special attention is paid to the prevention of wet and dirt intruding into the hub and corroding the ball races. A solid adjustable tie-rod is fitted for ease of correction of alignment of wheels if necessary at any time. A very much greater turning-lock is embodied than previously and the lock is stopped off by lugs forged integral with the steering arms which come in contact with the axle at the correct distance and prevent the danger of damage to tyres.

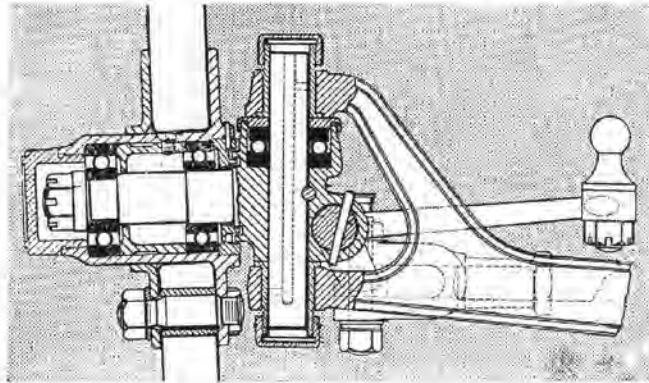




# The Morris-Oxford Light Car.

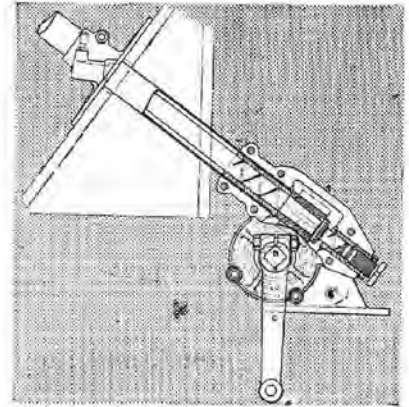


Section of De Luxe Model Back Axle.



Section of  
Stub Axle  
and Hub of  
De Luxe  
Model.

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Section of  
Steering  
Gear of  
De Luxe  
Model.

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# The Morris-Oxford Light Car.

SPECIFICATION.—*continued.*

**Steering Gear.**—Worm and worm wheel type, irreversible, contained in aluminium dustproof and oil tight box, large bronze bushes are fitted to moving parts, adjustment for end play is provided, the whole gear is rigidly bolted to the power unit and column raked to a comfortable angle. A large patent xylonite covered corrugated steering wheel, with aluminium centre and spokes is included. A large steady flange fixed to the floor board of the body assists to provide absolute rigidity of the whole gear.

**Radiator.**—This is of a unique and distinctive rounded V shape of special design and high efficiency, the cooling is on the thermo-syphon principle, and with the assistance of large water pipes and correct arrangement of water levels, the design is sufficiently effective to enable a fan to be dispensed with.

**Frame.**—Deep channel section pressed steel, with suitable cross members, and of generous robust construction.

**Chassis.**—Wheelbase, 7ft. 6in. Track, 3ft. 9in. Length over all, 11ft. Width (over hub caps), 4ft. 2in. Ground clearance, 8½in. Length from dash to end of frame, 5ft. 4in. Width of frame, 2ft. Back axle gear ratio, 4·6 to 1.

**Bearings.**—Hoffman ball bearings are fitted to gear box, road wheels, and axles.

**Brakes.**—Two sets of internal expanding, side by side, independently operating brakes, all contained in drums on the rear wheels and actuated respectively by hand side lever and foot pedal, they are lined ferodo and great care has been exercised to provide for exclusion of dust. All spindles have oilers fitted, by the use of which rusting up is prevented. All the brake connections are solid rods, with straight pull, and all operating levers are fitted to their shafts by castellations. Adjustment for wear can be taken up by the hand with the use of self-locking fly-nuts as fitted.

**Suspension.**—Semi-elliptic springs to front, 32in. long, ¾-elliptic springs to rear, 40in. long, every shackle bolt being hardened and ground and fitted with large screw down lubricator, this combination gives wonderful smoothness in running under all circumstances. Rear springs are hung beneath back axle.

**Wheels.**—Sankey detachable hollow pressed steel wheels, together with spare wheel are fitted, size 700 x 80; these are light and practically indestructable.

**Tyres.**—Dunlop car tyres, 700 x 80. 2 grooved on rear wheels. 3 plain. All fitted with bolt valves.

**Body.**—Elegant 2-seater flush side torpedo body on most up-to-date lines, with high sides and plenty of width, 42in. Carefully constructed to give the maximum comfort. Painted dark green, upholstered green leather. Fittings brass finish. Large tool box at back.

**Equipment.**—Best quality cape cart hood, one piece adjustable all metal "Auster" wind screen. Five best English manufacture lamps, comprising two self contained Mangin lens mirror headlamps, oil side and tail lamps, horn, tyre pump, jack, tools, and spare Sankey wheel and plain tyre.

**Weight.**—12½ cwt.

**Price - - 190 Guineas.**

**Price of Chassis £180,** Including Five Wheels and Tyres, Petrol Tank, Bonnet and Tool Kit with Jack and Pump.

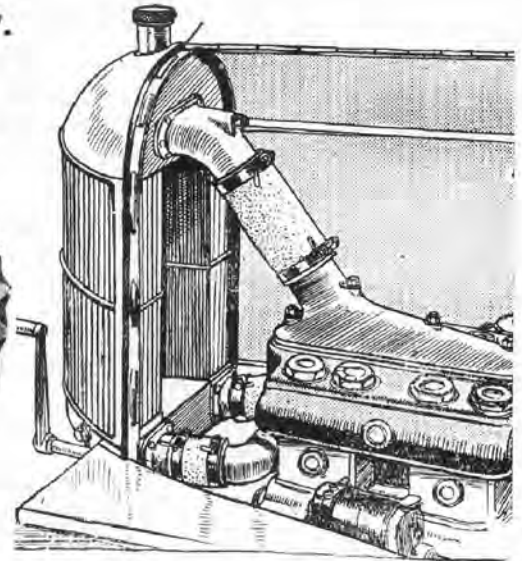




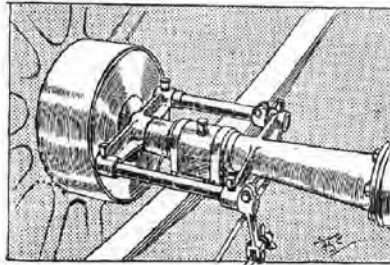
# The Morris-Oxford Light Car.



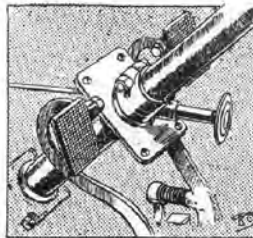
Back Axle Worm Gear. Differential dismantled showing accessibility.



Radiator and Connections.



Brake Arrangement.



Steering Support & Accelerator.

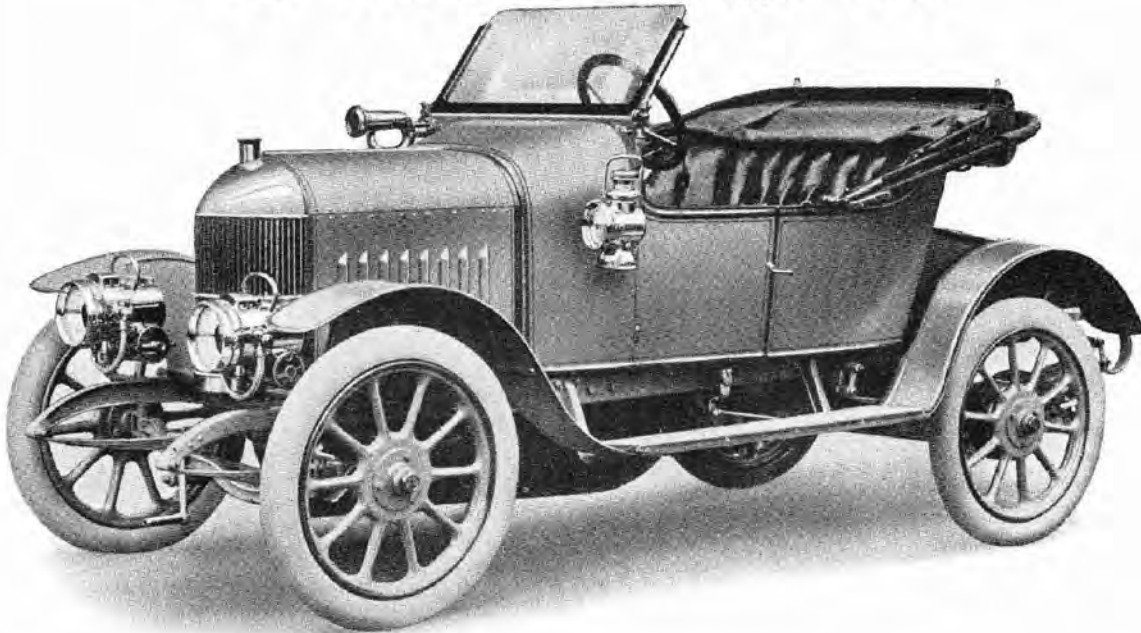
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Combination Shackle Bolt and Lubricator as fitted to De Luxe Models.



## The Morris-Oxford Light Car.



### 10 h.p. STANDARD MODEL.

Complete as above, including Hood, Wind Screen (wooden frame), 5 best English Lamps, Horn, Spare Wheel (less tyre), Kit of Tools, Jack and Pump, painted Pearl Grey. **Price £180.**

CODE WORD: **STANMODO.**



# The Morris-Oxford Light Car.

## SPECIFICATION OF STANDARD MODEL.

**Engine.**—10 h.p. specially designed **White & Poppe 4 cylinder water cooled Engine** of high efficiency, 60 m/m bore, 90 m/m stroke, cylinders cast en bloc, with inlet and exhaust manifolds cast integral with same. Valves fitted with adjustable tappets and enclosed in aluminium covers. Bottom half of crank case detachable. Government Tax, £3 3s. 0d. Ignition by Bosch high tension magneto.

**Gear Box.**—The Gear Box, Clutch and Engine are constructed as a single unit, suspended at three points from the main frame. Three speeds and reverse, direct drive on top. Gate change of the latest design. Ratios of gears same as De Luxe model.

**Clutch.**—Latest pattern multiple Disc type running in oil.

**Lubrication.**—Forced feed throughout engine. Absolutely automatic. Level indicator at side of crank case.

**Radiator.**—Unique V shaped Radiator of special design, and very efficient. Thermo Syphon cooling with extremely large water channels.

**Carburettor.**—White & Poppe. Entirely automatic. Embodying all latest improvements.

**Frame.**—Pressed Steel of deep section and robust construction. **Control.**—By foot accelerator.

**Chassis.**—Wheelbase, 7ft. Track, 3ft. 6in. Length over all, 10ft. 5in. Width (over Hub Caps), 3ft. 11inches.

**Front Axle.**—H Section forged steel of ample strength.

**Rear Axle.**—Worm drive of the very latest design. Driving shafts and differential removable for inspection without dismantling axle. Propellor shaft and universal joints entirely enclosed in torque tube of large dimensions, combining with engine and gear box in forming an entirely dust-proof and water-tight drive throughout the whole transmission.

**Bearings.**—Hoffman Ball Bearings fitted to gear box, road wheels and axles.

**Steering.**—Worm and Worm wheel, irreversible, 15in. steering wheel. Steering column raked to a comfortable angle.

**Brakes.**—Two sets of the internal expanding metal to metal type, all contained in drums on rear wheels, actuated by side lever and pedal.

**Suspension.**—Semi-elliptic springs to front, 32in. long,  $\frac{3}{4}$ -elliptic to rear, 40in. long, giving great smoothness of running under all circumstances.

**Wheels.**—Sankey Steel Detachable, 700 x 80 m/m.

**Tyres.**—Four Dunlop Car Tyres, 700 x 80 m/m, fitted with bolt valves, plain type.

**Body.**—Smart 2-seated flush side Torpedo Body of the latest design. Painted pearl grey, upholstered green leather. Brass mounts. Wide spring cushion. Tool box fitted at rear.

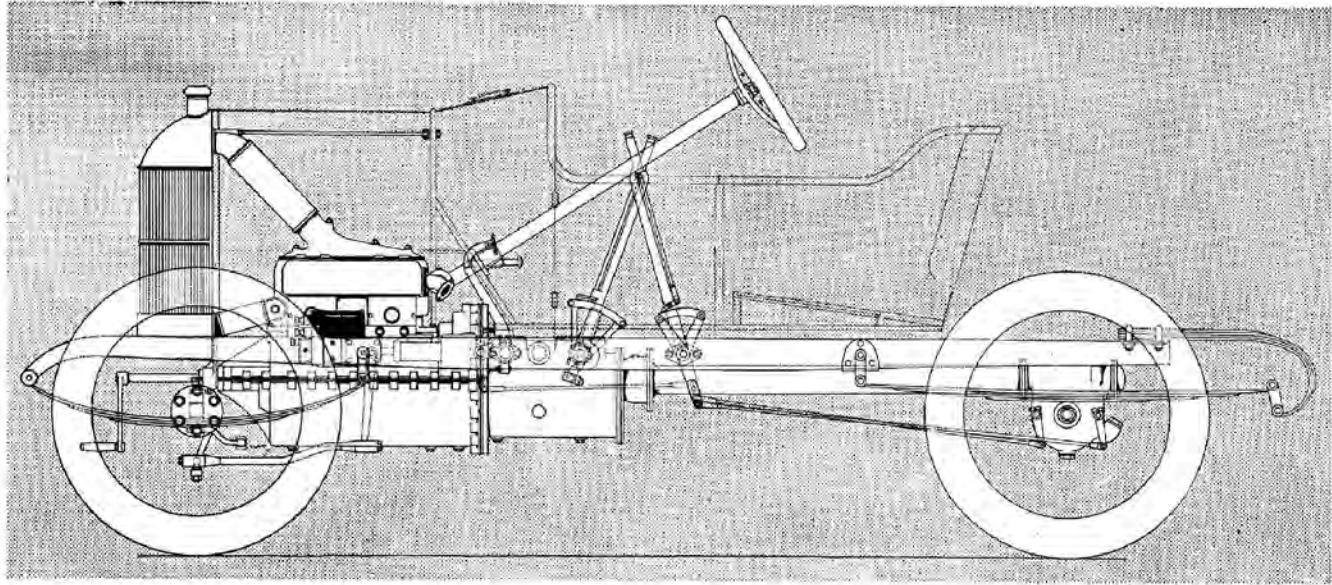
**Equipment.**—High-class Cape Hood, and Adjustable Wind Screen, with best brass fittings, full set of five best English Lamps, comprising:—two Acetylene Headlights, fitted with genuine Mangin Lens Mirrors, Oil Side and Tail Lamps, Horn, Pump, Jack, Tools, and Spare Sankey Wheel, less tyre. **Weight.**—11 cwt. **Price complete** £180.







## The Morris-Oxford Light Car.



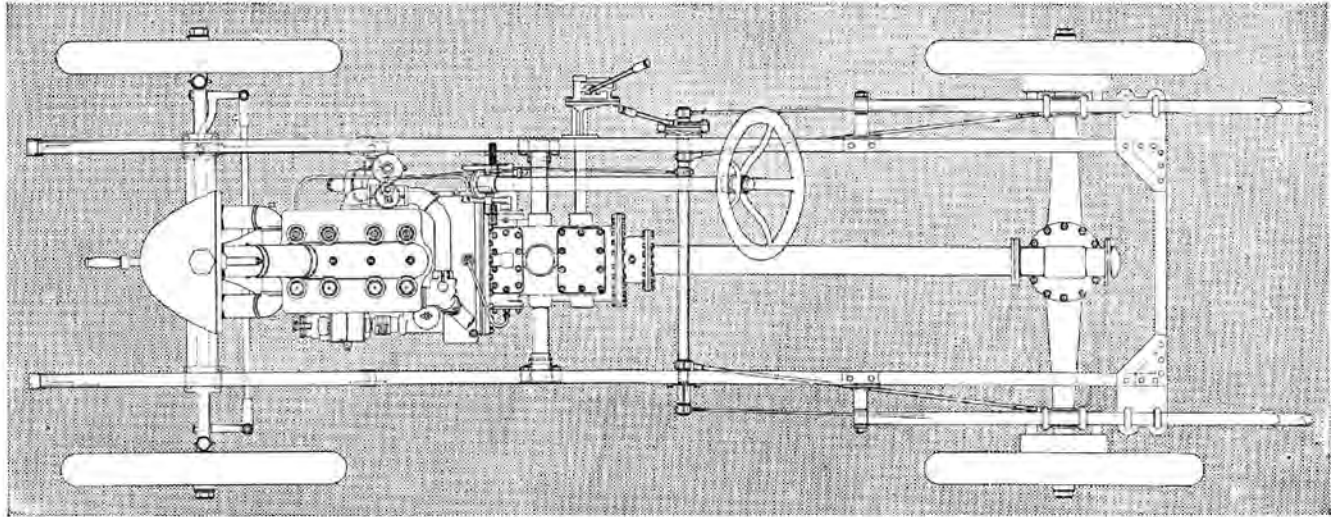
Elevation showing general arrangement of **STANDARD MODEL CHASSIS.**

**Price £160,** including five Wheels, four plain Tyres, 700 x 80 Dunlop, Petrol Tank, Bonnet and Fasteners, Petrol Pipe, no Dashboard, Tool Kit as complete car.

*CODE WORD: STANCHA.*



# The Morris-Oxford Light Car.



Plan showing general arrangement of **STANDARD MODEL CHASSIS.**

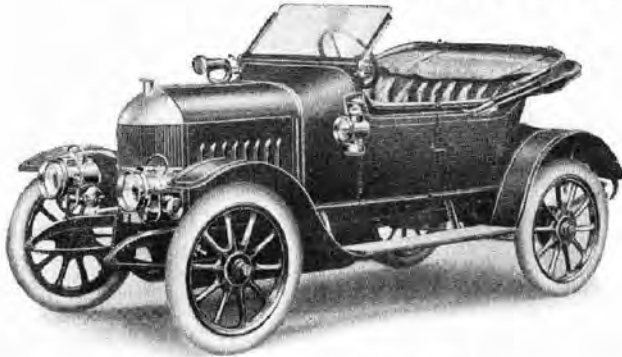
**CHIEF DIMENSIONS:—**

Wheelbase ..	7 ft.	Ground Clearance ..	7 in.	Width over all ..	3 ft. 11 in.
Track ..	3 ft. 6 in.	Body space, being length of frame behind dash ..	4 ft. 10 in.		
Width of Frame	2 ft.	Extreme length ..	10 ft. 6 in.	Weight ..	8 cwt.
Back Axle gear ratio	4.2 to 1.				

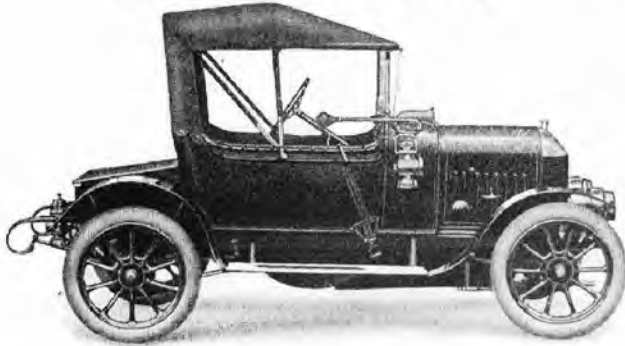




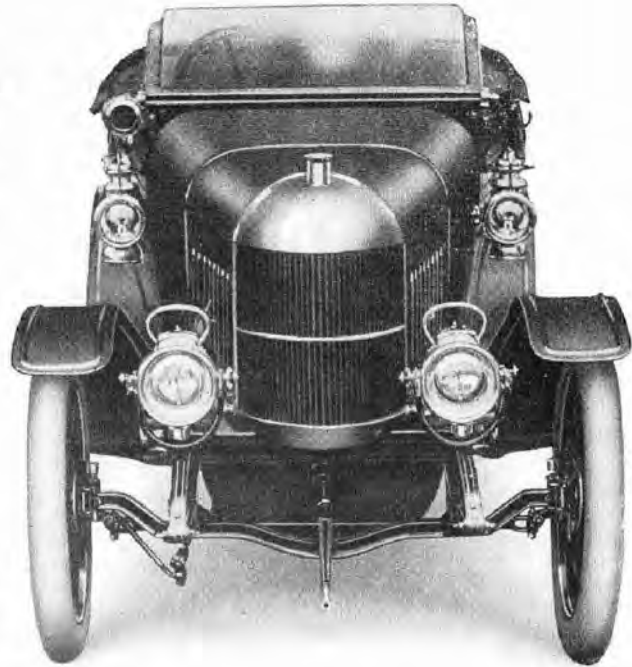
# The Morris-Oxford Light Car.



Another view of Standard Model.



Standard Model showing Hood up.



Front view of Standard Model.





# The Morris-Oxford Light Car.

## DISTINCTIVE FEATURES.

To the purchaser of a small Car, who is most frequently his own driver, the ability to start at any time at a moment's notice, simplicity of control when driving, and absolute freedom from trouble are of the first importance. In order to satisfy these requirements it is necessary that the car and its control mechanism shall be as simple as possible so that a minimum amount of attention is required from the owner both when driving and when in the garage. The more simple the control, the less the amount of adjustment required, and the fewer parts there are to go wrong, the better.

In the control of the new "Morris-Oxford" Light Car we have the acme of simplicity. The ignition is fixed, the throttle is operated by pedal only, and can be set at a minimum running position. For easy starting the throttle can be opened by means of the screwed adjustable accelerator pedal. Which is provided with a simple locking arrangement to prevent the setting changing without the knowledge of the driver.

The consumption of petrol is from 35 to 50 miles to the gallon, and tyres and lubricating oil are upon an equally economical basis. Speeds range from 5 to 50 miles per hour on top gear on average roads. The Government Tax is £3 3s. 0d., being the lowest rate for a Car with 4-cylinder engine.

The whole of the Transmission from starting handle to rear Wheels is enclosed in absolutely dust and waterproof, Oil-retaining housings, protecting it from undue wear, thus increasing its efficiency, providing greatly prolonged life and freedom from trouble.



A "Morris-Oxford" Car outside All Soul's College, Oxford.





## The Morris-Oxford Light Car.

DISTINCTIVE FEATURES.—*continued.*

The Engine, which is the very latest production of the celebrated firm of White and Poppe, Ltd., Coventry, has been specially designed and constructed for this Car. The Valves are of extremely large dimensions, as also are the Inlet and Exhaust ports. Adjustable Tappets fitted with fibre insets are provided, enclosed in Aluminium covers, rendering the Engine extremely silent under all conditions, and reducing wear to minimum. The Crankshaft is carried in **three bearings** of liberal proportions, lined with white metal, and the bottom-half of the Crankcase being detachable, gives easy access to the main bearings and big ends. Being produced with the very latest and most accurate automatic machinery it is possible to procure, irrespective of cost, ensures maximum efficiency with the greatest economy.

The three-speed gear box is a neat piece of design, the gears affording the two reductions, the direct drive and the reverse, being contained as a single unit in a light cylindrical shell, which in turn is carried in a cylindrical extension of the clutch case, the back cover plate which holds the shell in place carrying the housing for the spherical end of the propellor-shaft casing.

The Gear Box and Clutch casing forming with the Engine a single unit ensures absolute alignment of the driving mechanism, resulting in increased efficiency and reducing wear and noise. The multiple disc clutch has thirty-six plates running in oil, and is of the latest improved type, giving the very sweet engagement which is so essential on a small Car, thus reducing the strains on the driving mechanism and tyres.

As an instance of the extreme care which is exercised in the construction of the unit, all the parts of which, by the way, are made on the most elaborate jigs, the following clearances which are worked to are interesting.

The cylinder bores are machined to a .002in. limit, while the pistons are carefully ground to a .002in. limit. The limit on the cylinders is a plus limit and on the pistons a minus limit, and for practical purposes it is difficult to cut these limits down finer, therefore a marking system is adopted to overcome the difficulties of having too much or too little clearance.

The pistons that come out dead size are marked No. 1, those .001in. under dead size No. 2, and those .002in. under dead size No. 3. The same is done with the cylinders. The cylinders .002in. over dead size are marked No. 1, those .001in. over dead size No. 2, and those dead size No. 3. In assembling, every No. 1 cylinder has to have a No. 1 piston, etc., so a uniform clearance of .002in. is obtained for all pistons in the cylinders.

All the bores have to undergo a hydraulic test under a pressure of 600 to 700 lbs., and the water jackets are also hydraulically tested. After running in, all the piston rings are tested for clearance in the slots. This clearance must on no account exceed .004in. The gudgeon pins are ground to a .002in. limit.





# The Morris-Oxford Light Car.

## DISTINCTIVE FEATURES.—*continued.*

All connecting rods are machined down to the same weight, and at the same time the balance is taken into consideration, and great care is taken in testing the alignment of the bearings without the preliminary application of a scraper.

The seats of the valves are carefully ground with a special grinding tool to ensure a perfect concentricity with the valve stems. The bottom ends of the valve stems are hardened, and are also subjected to a severe test to ensure against brittleness.

The Lubrication is of the latest practice, oil being forced through all bearings of Engine and Gear Box, by the centrifugal action of the flywheel, thus ensuring a perfect and uniform lubrication directly in proportion to the work done.

An extremely handsome V type Radiator of novel design, and of the greatest possible efficiency, is provided. It is of the straight tube type, with an exceptionally large head of water. The water is taken to the bottom of the Cylinders through two large tubes, one on either side of the Cylinders, and from the top of Cylinders back to the Radiator by a single pipe of very large diameter. Special attention has been given to the cooling of the Valve Pockets, by providing very large water channels round Cylinders, thus obviating all possibility of overheating.

The Ignition is by a "Bosch" Magneto of the very latest enclosed type, which is universally recognised to be the most reliable form of ignition. It is driven off the timing gear through a coupling which allows of a wide range of adjustment.

The White and Poppe Carburettor is so widely known and highly appreciated that it needs no comment, but we would mention that amongst its advantages are easy starting, slow running, silence, rapid acceleration, great flexibility, power and economy.

The Frame is of the pressed steel type, and follows the usual practice in up-to-date Motor Car construction.

The front axle is of forged steel of girder section, the steering heads being formed integral with same, the stub axles carrying Hubs mounted on "Hoffman" ball bearings. The rear "live" axle is worm driven by propeller shaft, which is entirely enclosed in a torque tube of large dimensions, and which at its front ball shaped end encloses the Universal Joint and unites with the gear box in forming an entirely dust, waterproof, and oil retaining drive. This feature is undoubtedly unique in small car construction, and although expensive to produce its advantages are so great that we have not allowed the question of cost to prevent its adoption. The design of this axle gives the highest efficiency and absolute silence. It has been so arranged that the driving shafts and the whole of the differential and





## The Morris-Oxford Light Car.

DISTINCTIVE FEATURES.—*continued.*

gearing can be taken out for inspection, or adjustment, without in any way dismantling the axle casing from the springs, etc.

The Ball Bearings being one of the most vital points in motor car construction, we have decided to fit the highest class of bearings it is possible to obtain, irrespective of price, namely, "Hoffman." These Bearings are too well known to Motor Car users to need further comment.

Two independent sets of Brakes are fitted, both contained in dust and mud-proof drums on rear wheels. One set is actuated by brake pedal and the other by side lever. This system has been adopted to obviate the great strains and wear put upon the driving mechanism and bearings which must result when the brake is fitted to the Driving shaft and the braking power transmitted through all the axle gearing and differential to the road wheels, the parts of which have already ample work to do. It can be affirmed without hesitation that more back axle wear, and troubles, are caused by braking through the transmission, than from any other reason. Moreover, this system of braking on the back wheels is infinitely smoother in its application, thereby considerably increasing the life of the tyres, and it must not be forgotten, that with the countershaft type of brake, failure in any portion of the Drive puts this out of action. Special lips have been formed in the axle casing to prevent any possibility of oil reaching the brakes, which has been a source of trouble in most other types of back wheel brakes. All brake spindles and bearings are provided with lubricators. It must also be mentioned that throughout the car no keys or keyways are used, castellations in all cases being used to rigidly connect the parts; the only exception to this practice being in the case of the fly-wheel to the crankshaft.

The Steering is of the most advanced design, being of the worm and worm-wheel type. One of the great advantages of this system is in the fact that the worm wheel can be moved into several new positions, thus providing much longer life to this important mechanism, by bringing new wearing surfaces into position.

Hitherto the bugbear of small Cars has been inefficient springing, therefore this most important feature has received exceptionally careful consideration in the construction of the "MORRIS-OXFORD" CAR, neither trouble nor expense being spared in obtaining luxurious comfort in road travel.

Many of the small Cars at present on the market are fitted with fixed wheels, with all their attendant disadvantages. The many advantages of detachable wheels are now so universally recognised that any Car not fitted with them is very much out of date. At great expense we have adopted the well-known "Sankey" detachable steel (artillery pattern) wheel, which, in addition to its detachability, is practically indestructible, very light, extremely easy to clean, unaffected by climate, and its graceful appearance adds considerably to the high-class outlines of the Car.





## The Morris-Oxford Light Car.

DISTINCTIVE FEATURES.—*continued.*

It will be seen from the Specification that the Tyres fitted are of ample size, and of the best known and most reliable make.

A high-class flush-sided Torpedo Body, with high side doors, is fitted, painted in best style, and upholstered in Leather, which is fluted and buttoned in the latest approved style. Deep springs are fitted to the seat cushion and squabs, rendering them extremely comfortable. A high-class adjustable Wind-screen and Cape Cart Hood are fitted, also a sloping Tool Box is provided at the rear, and in the DE LUXE Model there is sufficient space for the fitting of a dicky seat.

The very full equipment of accessories and fittings included in the price of this Car, constitutes a record of completeness and quality on any small Car sold at so reasonable a figure. Almost every requirement to make the Car absolutely complete and ready for the road has been included in the Specification, and the purchaser therefore knows exactly the amount he has to expend, and will not find, when he has decided upon this Car, that there are endless other additional fittings to be acquired, thus greatly increasing his outlay.

Although the price of this Car is so moderate yet if the price were doubled it would not be possible to improve upon the foregoing Specification, either in design, materials or workmanship, or economy in running costs.



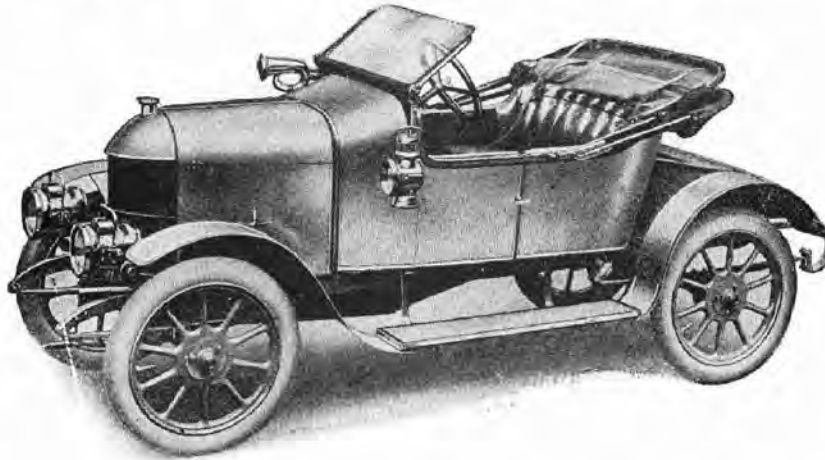
A "Morris-Oxford" Car outside the University Parks, Oxford.







## The Morris-Oxford Light Car.



£175

£175

10 h.p. MORRIS-OXFORD COMMERCIAL MODEL.

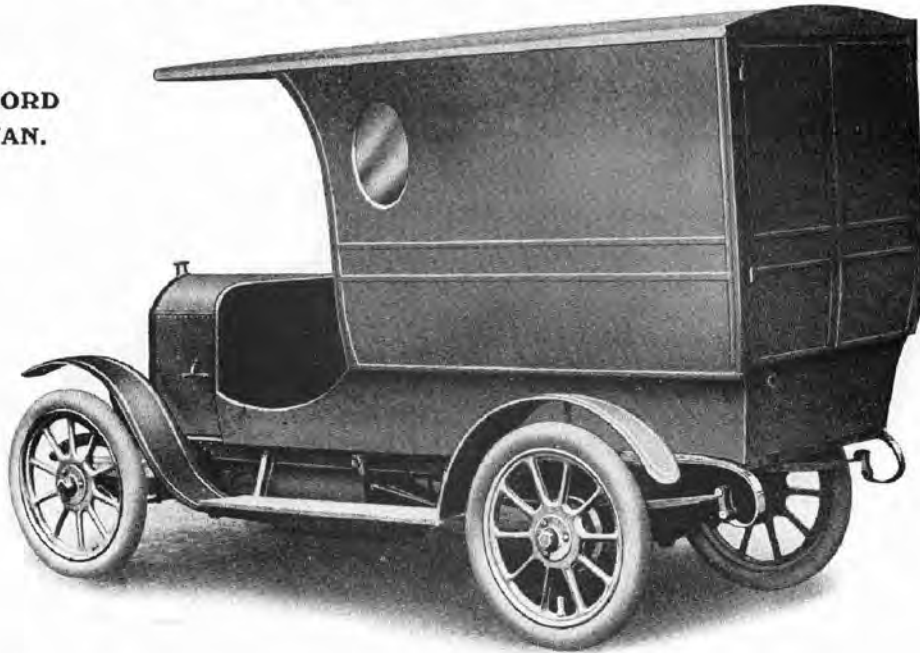
**Specification.**—Exactly as Standard Model, with the only exception that the body is not so roomy (width 32 inches) and it is not so highly finished. It has been introduced to meet the requirements of Commercial Travellers and the like, the body not being considered of such moment as in the case of the purely pleasure vehicle. The price complete with full Equipment as Standard Model is **£175.**

CODE WORD: **COMMERO.**



## The Morris-Oxford Light Car.

10 h.p.  
MORRIS-OXFORD  
DELIVERY VAN.



£230

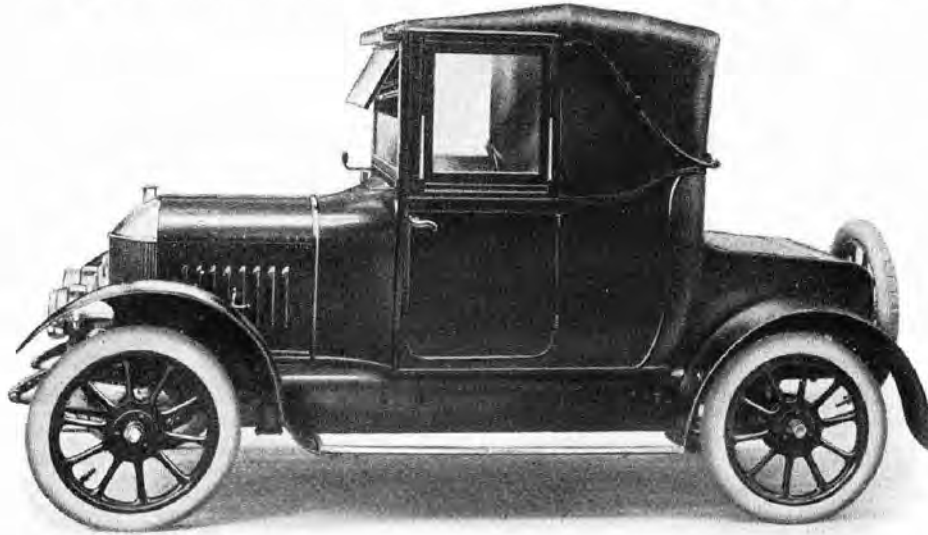
£230

Complete as above, fitted on De Luxe Model Chassis with large capacity, mahogany panelled body, painted to choice (no lettering), equipment comprising 5 best English Lamps, Horn, spare Wheel and Tyre, Tool Roll and Tools, Jack, Pump, Oil can. **£230**  
This body is shown on a Standard Chassis, but is now fitted on De Luxe Chassis which is better suited for the purpose.



## The Morris-Oxford Light Car.

10 h.p. MORRIS-OXFORD Inside Driving COUPÉ MODEL.



£255

£255

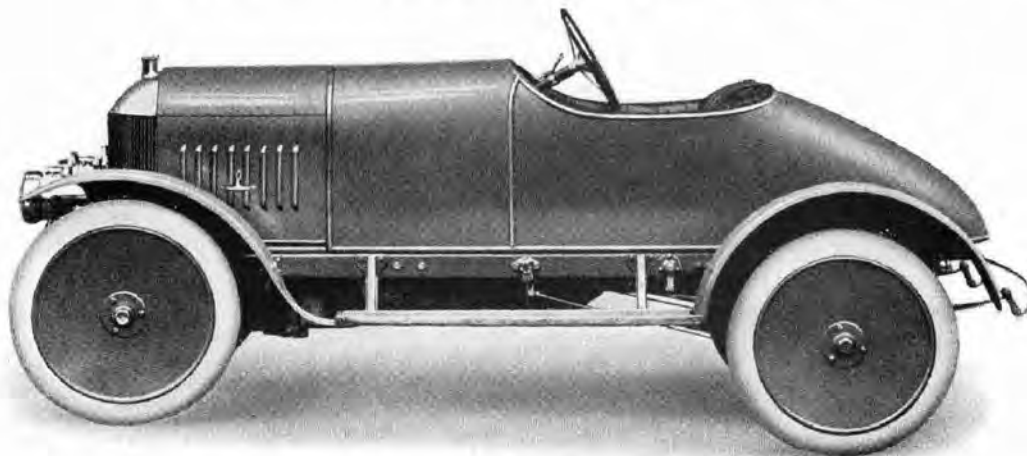
Complete as above, with inside driving Coupé body, fitted on De Luxe Chassis, made to open, painted to choice, luxuriously upholstered in Bedford Cord, equipment includes 5 best English Lamps, spare Wheel and Tyre, Horn, Tool Roll and Tools, Jack, Pump, and Oilcan. **£255.**

CODE WORD : **CUPOLO**



## The Morris-Oxford Light Car.

10 h.p. MORRIS-OXFORD SPORTING MODEL.



£220

£220

Complete as above, with special wind cutting racing type one seater body, of very light construction, fitted on De Luxe Chassis specially picked and tuned up, with suitable gear, equipment includes two Head Lamps (self-contained), Speedometer, Horn, Tail Lamp, Spare Wheel and Tyre, Disc Wheels, Mudguards, Side Platforms, Ignition advance, Tool Kit, Jack, Pump, and Oilcan. **£220.**

CODE WORD: **SPEEDO**



## The Morris-Oxford Light Car.

### A Few Unsolicited Testimonials from Satisfied Users.

Dear Sirs,—I thank you for your courteous and helpful letter, and feel sure if you treat all your clients in the same way, you have a great future before you for your car is a long way ahead of any others in the same class, and from the remarks made on mine by those who have a knowledge of engineering it has made an impression. I told the head of a very old established firm of coachbuilders who have taken up motor work that they ought to apply to you for an Agency. I will let you know how things go on, but I think with the assistance you have given me I shall get on all right, as I am not devoid of a knowledge of mechanics.

Yours faithfully, A. S. N.

*Ticehurst, Sussex.*

*Ipswich.*

Dear Sirs,—I enclose cheque for a/c, and thank you for your letter explaining about starting in morning, I am glad to say I have got over the difficulty, and I am also pleased to tell you I am *quite delighted* with the little car, there is nothing like her on the road, as she is so up-to-date and a real pleasure to drive, and all you say of her; its a great pleasure to deal with a firm like yourselves, who do all they can to help their clients, I have helped to sell several of these cars, as I consider them the *best* little car on the road, and I have owned and driven cars for 12 years now. Wishing you every luck, and please let me help you should you hear of a customer in these parts, as I shall be only too pleased to show the car and give a run.

Yours truly, J. W. M.

*London, S.W.*

Dear Sir.—Many thanks for your note *re* Morris Oxford. The lubricant for the worm gear has been duly sent and I hope you will find it an improvement. I am glad to say my car is giving excellent results and bears out your claims. It is much admired everywhere and provokes enquiries. Just back from a fine run to-day via Leatherhead, Guilford, Hogsback, Hindhead, Milford, Godalming, Guildford, back to Croydon, just 90 miles; practically as much petrol as I started with and picked up a two gallon tin of Shell II in Guilford. Cleared the Hogsback on 2nd speed with the utmost ease.

Yours very truly, J. W. G. B.

*St. Ives, Cornwall.*

Dear Sir,—You will be glad to hear that we had a splendid run down through Devon and Cornwall and that we had no trouble of any sort. The car has behaved beautifully, and the hills in Devon were very bad indeed, as we came through Moreton-Hampstead and Princetown across Dartmoor, she was inclined to overheat at first on these hills, but the weather was "scorching," but I have given the engine a couple of holes more air which has had the necessary effect of keeping her cool. Our petrol consumption ran at 34 m.p.g. coming down, which wasn't bad, but I own here "lane crawling" it has been much higher, I need hardly tell you that the car has been more than admired by everyone. The garage people seem to go in raptures; and one M.C. owner, whom I met on Friday here in St. Ives, has gone away very envious of the new body. The tyres are wonderfully good, and so is the change speed, when one gets used to it. The springing on this car seems exceptionally good; in fact the car rides beautifully over the worst roads down here.

Yours faithfully, F. G. C.





# The Morris-Oxford Light Car.

TESTIMONIALS.—*continued.*

*Princes Risborough.*

Dear Sir,—Herewith postal order for 1/6, in payment of enclosed account. I shall be glad to receive any literature about your future improvements as I have many enquiries as to how the little car runs from people who are wanting one like it. I am glad to say I can always truthfully reply that I am fully satisfied.

Yours faithfully, M. T.

*Nr. Ross, Herefordshire.*

Dear Sir,—It is difficult to express how pleased I am with the Morris-Oxford suggested to me through Fryers, Ltd. She does all that you claim for her as regards consumption and speed. I find no difficulty in obtaining 50 miles an hour and averaging 35 m.p.h. over decent roads. The clutch and gears make the car ideal for town driving, in fact I can find no fault with any single detail in the car's behaviour. I must also thank you for the civility and promptitude shown by your staff at all times. Wishing you every success, believe me,

Yours sincerely, G. B.

*Newcastle-on-Tyne*

Dear Sirs,—I have, as you know, kept careful account of the running costs of the Morris-Oxford Car, which I got from you on the 8th of June last, and think you will be interested to know the results of 4,000 miles running. I have been using the second quality petrol which does at least as well as the first quality, if not better, and with two up and often some luggage, have averaged 40 miles to the gallon each month, until latterly when, owing to a little carboning, the consumption has fallen off somewhat. I have used 5 gallons of engine oil, and about a gallon of gear oil, and the two grooved tyres are still good for several hundred miles before retreading. One of the heavy plain covers was retreaded after doing 3,600 miles. The actual running costs for petrol, oil and tyres runs out at 96d. per 100 miles, allowing an average of 4,000 miles for the heavy plain and 5,000 miles for the grooved tyres, the former being on the front wheel most of the time, and the latter on the driving wheels. The car runs as quietly as when it was first driven from Oxford and there is no sign of wear anywhere.

Yours faithfully, E. F.

*Coventry.*

Dear Sirs,—It may interest you to know that I have recently completed a tour of 1,400 miles through N. Wales, the English and Scottish Lake Districts, and the Highlands, and back by the East Coast on a Standard Morris-Oxford Car. On frequent occasions, we went out of our way to find well-known sporting hills to climb, but the Morris-Oxford was never fully extended, and made a clean ascent of them all including Sutton Bank, which as you may know, is nearly a mile long, and has 200 yards of 1 in 3.9. The car is an ideal one to drive, and proved a most willing slave. The Petrol Consumption worked out at a tin a day for an average of 80 to 100 miles and the oil consumed was exactly two gallons for the whole distance. The change speed gear, steering, springing, and brakes are as perfect as I imagine they could be; and general comfort in driving, leaves nothing to be desired.

Yours faithfully, F. J. R.





# The Morris-Oxford Light Car.

## SUMMARY OF 1914 PRICES.

10 h.p.	De Luxe Model	...	...	190 Guineas.	...	...
10 h.p.	De Luxe Model Chassis	...	...	£180.	...	...
10 h.p.	De Luxe Model Coupe	...	...	£255.	...	...
10 h.p.	Standard Model	...	...	£180.	...	...
10 h.p.	Standard Model Chassis	...	...	£160.	...	...
10 h.p.	Commercial Model	...	...	£175.	...	...
10 h.p.	Delivery Van	...	...	£230.	...	...
10 h.p.	Sporting Model	...	...	£220.	...	...

Code Word : UNIVO.  
 Code Word : UNIVASS.  
 Code Word : CUPOLO.  
 Code Word : STANMODO.  
 Code Word : STANCHIA.  
 Code Word : COMMERO.  
 Code Word : VANGARO.  
 Code Word : SPEEDO.

### PRICES OF EXTRAS:

Side Curtains	..	25/-
Number Plates	..	7/6
Tool Box on Side Platform	..	20/-
Dicky Seat on De Luxe	.. ..	£4.
Side Valances to Platforms		25/-
Variable Ignition control fitted	..	25/-
Nickel finish throughout on De Luxe model		£5.



### A FEW SUCCESSES.

**LONDON - EDINBURGH - LONDON**, to schedule time without adjustment.

**DUTCH RELIABILITY TRIALS**, (6 days) first, no adjustment, full marks.

**OXFORDSHIRE MOTOR CLUB**, annual hill climbing contest. First, second and third.

**COVENTRY AND WARWICKSHIRE MOTOR CLUB**, annual hill climbing contest for cars. First and second.





# The Morris-Oxford Light Car.

## A few words about our Service Department.

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OUR Service or Sundry Department has been installed to attend to the wants of users with that promptitude which is so important to motor owners at all times, this department is so organised that it can despatch any part from stock, and a spare part list has been issued with all parts named, numbered and priced, and code words are also arranged for giving different methods of despatch, this is explained in the list which is delivered with each car, it is advisable for every owner to open a deposit account with this department thereby assuring instant despatch unless of course it is preferred to send remittance with order.

This department also deals with all claims under the guarantee, all parts sent in, in accordance with the terms on page 3 of cover are immediately dealt with, an expert is retained to deal with this work with consequent fairness and celerity.

A leaflet entitled "The Care and Management of the Morris-Oxford Car" has been issued by this department, dealing thoroughly with the general running of the car, and also providing many valuable hints to owners, this book is sent out with every car, and further copies will be supplied to owners with pleasure on sending in a written application quoting their car number and name of agent from whom purchased.

Thus it will be seen that our Service Department is thorough, a point of vital importance to every buyer, and it will always be kept up-to-date and so achieve an almost greater reputation than in the past.

A few moments consideration of the above will suffice to show its value to the user of the Morris-Oxford Car, and it should also help to weigh in favour the minds of those who are contemplating the purchase of one of our cars.

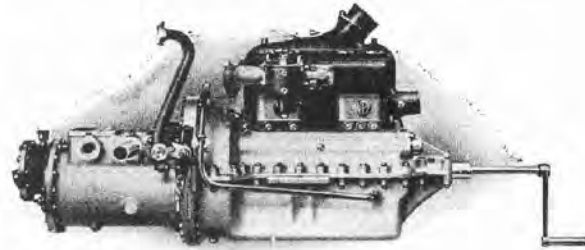
**W.R.M. MOTORS, Ltd.**



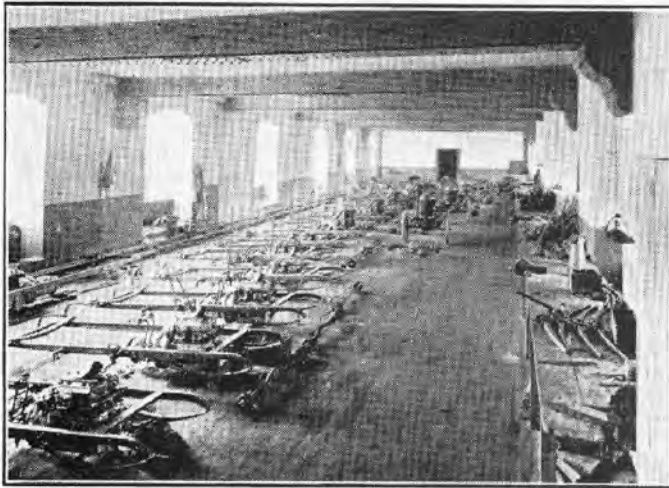




## The Morris-Oxford Light Car.



View of Power Unit removed from Chassis.



Our Erecting Shop.



Consignment of Cars ready for despatch.





## The Morris-Oxford Light Car.



View showing our Cowley Works.