The 14 40 h.p. (Acyl) & 2060h.p. (bcyl)

PROPERTY OF THE MOYAL AUTOMOBILE GLUB LIBRARY NOT TO BE TAKEN AWAY

New O.H.V. Models.

O.F. DINGWALL

1925 1926

STAR GARS



14/40 h.p. (4-Cyl.) STAR.		
Chassis		£400
"Lepus" Two-Seater		£505
"Lynx" Five-Seater		£520
"Auriga" Three-quarter Coupé		£600
"Pavo" Saloon Coupé		£600
"Lyra" Saloon		£700
Specification on pages 10—12.		
20/60 h.p. (6-Cyl.) STAR.		
Chassis		£650
"Sagitta" Two-Seater		£755
"Vela" Five-Seater		£775
"Perseus" Three-quarter Coupé		£875
"Antlia" Saloon Coupé		£875
"Libra" Saloon		£975
"Tucana" Three-quarter Landaulet	to	£975

Specification on pages 5, 8 and 9.

"Andromeda" Saloon Landaulette

"Norma" Saloon Limousine

Subject to Terms of Business and Guarantee as printed in the Company's current Catalogues and Order Forms.

On both Models Lanchester Patent Four-Wheel Brakes are standard.

Sole Designers and Manufacturers:

The STAR ENGINEERING Co., Ltd., WOLVERHAMPTON. Telephone 995 Wolverhampton. ESTABLISHED 1883

London Depot and Showrooms:

THE STAR MOTOR AGENCY LTD.,

24, LONG ACRE, W.C. 2.

Telegrams: "STARGAZING, LONDON."

Telephone 4614 GERRARD.



£1000

£1000



SIGNAL TRIUMPH of motor engineering is achieved by the 14/40 h.p. and 20/60 h.p. Star Chassis. No long list of recommendations is needed to introduce these new overhead valve models. They mark a further advance in that unrivalled standard

of STAR QUALITY which has long been recognised as the hall-mark of British craftsmanship at its best and the unquestionable guarantee of maximum efficiency and economy. They offer all those much-envied characteristics in regard to high power, silence and smoothness in running hitherto only associated with a few high-priced cars, whose cost prohibits their purchase except by the very wealthy. They are ideal for closed bodies, but in addition have a road performance which renders them very suitable for fast touring work. Not only do these new Star models, at extremely moderate prices, challenge the most expensive cars in every direction—design, material, construction, finish and luxury of travel; the purchaser will also find them surprisingly economical to operate. Taxation and running expenses are low, and they will cost less in upkeep than any other make of car of similar class.

Constructed, like all Star cars, by workmen of the highest skill and long experience, these new models will prove beyond all doubt the dearness of the so-called cheap cars of Mass Production. The new chassis have shown remarkable and consistently satisfactory results throughout a protracted period of rigorous testing, and have given absolute evidence that they will maintain the Star tradition of LONG LIFE AND RELIABILITY.

More need not be added; the particulars of the new engines and the specifications which follow speak for themselves.

The Power Unit of the 20/60 h.p. 6-Cyl. STAR Chassis.

NOTE.—The following also applies to the Power Unit of the 14/40 h.p. CHASSIS, excepting that the latter has 4-cylinders with a total piston displacement of 2120 c.c., and the crankshaft and camshaft are each carried in 5 bearings instead of 7.

DESCRIPTION.



NGINE—The engine is of the 6-cylinder in line type, 75 m.m. bore × 120 m.m. stroke, giving a total piston displacement of 3,180 cubic centimetres or 194 cubic ins. The cylinders are

cast in a single block, which is secured to the crankcase by 14 large studs in line with the main bearings. This construction, together with the massive seven bearing crankshaft, gives that rigidity so necessary in an engine which develops high power with extreme smoothness.

Detachable Head.—A single detachable head is fitted, held to the cylinder block by 20 long nickel chrome studs, which are so spaced as to ensure even pressure on the joint face. The design of the gasket is such that it stays on the cylinder face and is not damaged when the head is removed. Gasket trouble is unknown in Star engines, as distinct from those engines which require a new gasket each time the cylinder head is lifted.

Two over-head cobalt chrome valves are arranged in each combustion space, the latter being of special form to promote turbulence, and machined all over to close limits, ensuring equal compression in all cylinders. Each valve is fitted with two high tensile steel springs secured by a split cone. The valves are operated by nickel chrome steel rockers and light tubular steel push rods, a rocker being also fitted between each cam and tappet in the crankcase. Oil is fed from the oil pump to all the overhead gear, and definitely lubricates all the working surfaces, ensuring long life and silence. The valve gear is enclosed by a massive cast cover.

Crankcase and Lubrication System,

The crankcase, cast in a special aluminium alloy, is an extremely rigid structure, with strongly ribbed panels holding the main and camshaft bearings, of which there are seven each. The crankshaft bearing caps are held in the upper half of the crankcase, the crankshaft bearing shells are phosphor bronze, lined with special white metal, the camshaft bearings being phosphor bronze each end, with white metal intermediates.

The oil pump is of the gear type, driven by spiral gearing from the rear of the camshaft, and being situated in the oil sump, needs no priming. The pump delivers oil direct to the main and camshaft bearings, first passing through an efficient filter, which is readily detachable for cleaning, without losing any oil. A noteworthy point is that the filter retains any impurity, which is removed when the filter is cleaned, as distinct from those types of filter which merely keep the impurities in the oil sump.

The oil pump also feeds oil to the timing gears and to the constant level troughs into which the connecting rods dip. A gauge dip rod is fitted in an accessible position for checking the quantity of oil in the sump.

Timing Gear and Accessory Drive.-

There are but three gear wheels in the timing case in front of the engine. The crankshaft and accessory drive shaft wheels are of hardened steel, while the camshaft wheel is a special laminated composition wheel which has proved to be durable and silent under the most protracted and strenuous tests. These wheels have helical teeth and are lubricated by a jet from the oil pump. From the rear end of the accessory drive shaft is driven the dynamo and magneto, in tandem. The dynamo may be removed and the magneto moved forward very readily, so that the car is not out of commission in the event of a dynamo overhaul. In this way, the only weak point of the usual tandem drive layout is eliminated. On the front end of the accessory drive shaft is fixed the water pump impeller. There is only one gland in the water pump, of a very efficient spring adjusted type, incorporating a trap and drain for preventing

The Power Unit of the 20/60 h.p. STAR Chassis.

DESCRIPTION.—Continued.

water entering the crankcase, in the unlikely event of gland leakage.

Pistons and Connecting Rods.—The pistons are of a special aluminium alloy, die cast, and provided with three rings, the lower of which functions as a scraper, thereby preventing oil from entering the combustion chamber. The piston skirts are split in a form which prevents noise, while permitting perfect freedom at all temperatures.

The connecting rods are made from stampings of Duralumin, a feature originated by the Star Company, and now coming into general use. The big end bearings are phosphor bronze shells, white metal lined, with large diameter flanges. Four nickel chrome bolts secure each connecting rod cap.

The lubrication of the pistons and connecting rod bearings is by means of spray from the constant level troughs. This method obviates drilling small holes in the crankshaft and has been found perfectly satisfactory at the highest speeds. A feature of all Star Engines is their truly remarkable economy in lubricating oil.

Induction and Exhaust System.—The exhaust manifold is so arranged that the gas from each cylinder exerts an extractor effect on the other cylinders, which, in combination with a really efficient silencer, puts all possibility of back pressure out of the question at any speed.

The vertical carburetter is attached to a curved pipe which is cast integral with the exhaust manifold. The mixture extracts only sufficient heat from this to prevent freezing in cold weather. The induction tract proper, which is cast in the cylinder head, has been arranged to supply each cylinder with an equal amount of petrol and air. Careful tests have proved the success of this arrangement, which has been achieved without the use of petrol traps, return pipes and the like, devices which are merely attempts to cure a disease (i.e. bad distribution) which should not exist in a correctly designed

induction system. The flexibility and smooth running of this engine has to be tried before an adequate realisation of it can be attained. The air is drawn through a silencing plate before it reaches the carburetter, this plate also acting as a dust extractor.

Cooling.—As before mentioned, pump circulation is used, the water passing from front to back of the cylinder block, and from there to the back of the cylinder head whence it sweeps along to the front and to the radiator. This method, which may be termed the "series" method, is much more effective than the older "parallel" method, as the water speed is much higher, thereby preventing the formation of steam bubbles, hot patches and the like at high speeds and heavy loads.

The water is led to a large honeycomb radiator through which air is drawn by the Star oil reservoir fan, a device which requires lubrication only very occasionally.

The whole of the water in the system may be withdrawn through the drain plug hole below the pump.

Provision is made for fitting a thermostat for use in climates which have extreme temperature variation.

Electrical Installation.—The whole of the lighting and starting installation is specially made for us by one of the leading electrical manufacturers.

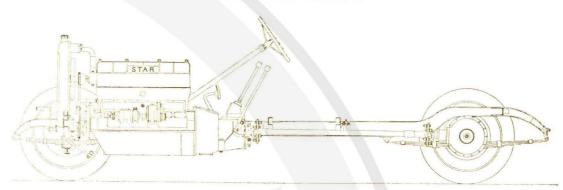
The dynamo and starter are separate units, working on the metallic return, or double wire system—a system which all the leading electrical experts definitely favour.

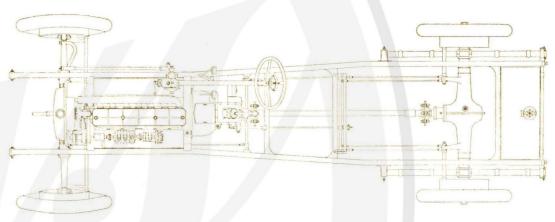
Although reliability and efficiency have had first consideration in the design of the engine, a high standard of neatness and smoothness of outline has been attained.

Note.—The above description also applies to the Engine in the 14/40 h.p. chassis, excepting that the latter has 4-cylinders with a total piston displacement of 2120 c.c., and the crankshaft and camshaft are each carried in 5 bearings instead of 7.

The 20/60 h.p. 6-Cyl. STAR Chassis.

SPECIFICATION.





Chassis layout.

ENGINE

IX-cylinder. Bore 75 m.m. Stroke 120 m.m. Capacity of cylinders 3180 c.c. Treasury Rating 20'9 h.p. Annual Tax £21.

The cylinders are cast in a single block, and a separate head is fitted. The crankcase has a detachable oil base, the crankshaft being carried in the upper half by seven bearing caps. The crankshaft is of massive proportions to ensure rigidity, and is machined and ground all over.

There are two overhead valves in each combustion space, operated by rockers and push rods, gear driven from a single camshaft in the crankcase. Between each cam and tappet in the crankcase a rocker is also fitted.

The whole of the valve gear is positively lubricated from the oil pump. The combustion heads are of special formation to promote turbulence and machined all over to close limits to ensure equal compression in all

cylinders. The main and big end bearings are phosphor bronze, lined with white metal, and the camshaft bearings at each end are phosphor bronze, the five intermediates being white metal.

A pump of the gear type located in the oil sump, delivers oil direct to main and camshaft bearings, also feeding oil to the timing gears and the constant level troughs through which the dippers on the big ends of the connecting rods pass and supply oil to the pistons in the form of spray.

46 IGNITION

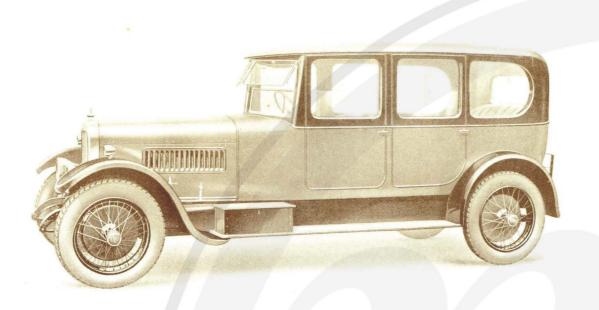
Standard high tension magneto, driven in tandem with the dynamo from the rear end of an accessory drive shaft.

COOLING

Pump circulation with large honeycomb radiator and belt-driven fan. Provision is made for fitting a Thermostat for use in climates which have extreme temperature variation.

(A full description of the Engine will be found on pages 3 and 4.)

[Continued on page 8.



The STAR 20/60 h.p. (6-Cyl.) "Libra" Saloon.

DIGNIFIED and sumptuously appointed motor carriage, with "V" shaped front and seating accommodation for five persons.

The front seats are of the chair type, both being adjustable.

The rear seat is luxuriously comfortable with its deep cushion and squab generously stuffed with real curled horse hair on spring frames.

Antique leather or carriage cloth of first quality, to customer's selection, is used for the upholstery.

There are four doors with slam lacks, and outside and inside handles. The nearside front door has a private lock and the other doors are each fitted with an inside catch, making the car thief-proof if left unattended. Each door has a frameless plate glass window, operated from the inside by a patent winder. Carefully selected close-seasoned ash is used for the body framing and the panelling is in handbeaten silver-faced steel. The floor boards are detachable for easy access to chassis mechanism. The running boards are covered with lin-rubber and framed in aluminium angle plate.

Carpets are fitted to the floor boards, an electric light is carried in the roof, and a silk blind is fitted to the rear window.

A polished walnut instrument board carries the lighting and starting switches, speedometer, clock and dash lamp, and has a small recess.

The spare wheel is carried on a bracket at the front off-side and a box on the off-side running board contains the tool kit.

This saloon is a choice example of the coachbuilder's craft, and is finished in any colour to customer's choice, with black wings and valances.

PRICE - £975.

Subject to Terms of Business and Guarantee as printed in the Company's current catalogues and order forms.

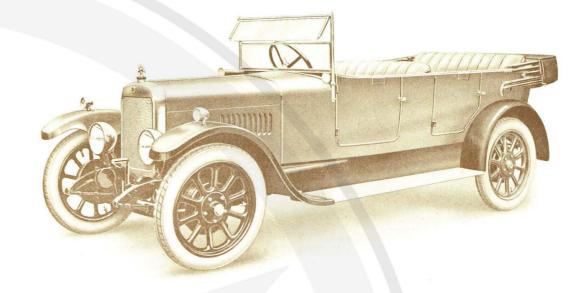
EOUIPMENT

Lighting and Starting Set, comprising— Dynamo and Motor. Switchboard. Battery. Pair Head Lamps on Pedestal Brackets-Pair Side Lamps on Wings. One Tail Lamp. Dashboard Lamp. Interior Roof Light,

Rebound Dampers to both axles Lanchester Patent Four-wheel Brakes. Electric Horn fitted under the bonnet. Auxiliary Bulb Horn. Speedometer, Clock. "V" Shaped Double Windscreen. Windscreen Wiper. Silk Blind to rear window.

Spare Wheel and Tyre. Spare Wheel Carrier. Folding Luggage Grid. Number Plates. Licence Holder. Kit of Tools.

Specifications and Prices subject to alteration without notice.



The STAR 14/40 h.p. "Lynx" Five-Seater.

A STRONG and well designed 5-seater, accommodating two persons in the front and three in the rear seat with every comfort and ample leg room.

The rear seat has been arranged at an angle to afford the maximum of comfort and correct seating position with a squab of adequate height to support the shoulders and ensure protection from draughts.

There are four doors, each with a useful pocket, and slam locks with outside end inside handles are fitted.

The body is framed throughout in close-seasoned ash and panelled in hand beaten silver-faced steel. Floor boards are detachable for easy access to chassis mechanism. The running boards are covered with lin-rubber and framed in aluminium angle plate.

The hood, which is of black leather cloth of best quality, is complete with rigid all-weather side curtains opening with the doors, and which can remain standing the entire length of the body, if required, when the hood is down.

The car is upholstered in best quality antique leather, there being a range of four choice leathers to select from. Cushions and squabs are built up on spring frames and genuine curied horse hair is used for the padding.

A double front windscreen is fitted, top half made to swing outwards.

A handsome six-panelled M.E. rear windscreen in two halves of three panels each, each half being easily removable from its socket for storage, if desired, in receptables under the seats.

Lighting and starting switches, speedometer, clock and dash lamp are mounted on a polished walnut facia board, provided with a small recess.

The floor is covered with hair carpet mats, and a leather cloth envelope of best quality is provided for the hood.

The spare wheel is mounted on a bracket at the front off-side, and the tools are carried in a box which also acts as a foot rest for the rear seat passengers.

Painting is to customer's choice of colour, with black wings and valances.

PRICE - - £520.

Subject to Terms of Business and Guarantee as printed in the Company's current catalogues and order forms.

EQUIPMENT.

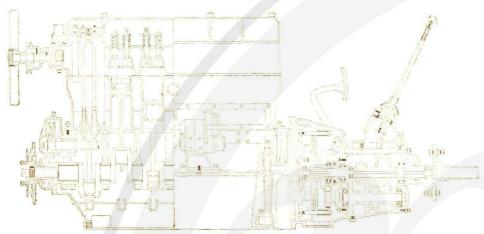
Lighting and Starting Set, comprising— Dynamo and Motor. Switchboard, Battery, Pair Head Lamps on Pedestal Brackets, Pair Side Lamps on Wings, One Tail Lamp, Dashboard Lamp, Electric Horn fitted under the bonnet.
Auxiliary Bulb Horn.
Speedometer.
Clock.
All Seasons' Hood.
Hood Envelope.
Detachable Side Curtains with Celluloid
Windows opening with the doors.
Adjustable Double Windscreen.
Windscreen Wiper.

Rebound Dampers to both axles.
Lanchester Patent Four-Wheel Brakes.
Six-panelled M.E. Rear Windscreen
Spare Wheel and Tyre.
Spare Wheel Carrier.
Folding Luggage Grid.
Number Plates.
Licence Holder.
Kit of Tools

Specifications and Prices subject to alteration without notice.

The 20/60 h.p. 6-Cyl. STAR Chassis.

SPECIFICATION. - Continued.



Engine and Gear Box Unit.

CARBURETTER.

Solex vertical carburetter. Air is drawn through a silencing plate before reaching the carburetter. The petrol feed is by Autovac, drawing its supply from the main tank situated at the rear of the chassis.

CLUTCH.

Single dry plate type, carried direct on first motion shaft of the gear box, which spigots into the end of the crankshaft. All misalignment is thus obviated. A very sturdy but simple withdrawal mechanism is fitted, and a clutch stop is incorporated.

GEAR BOX.

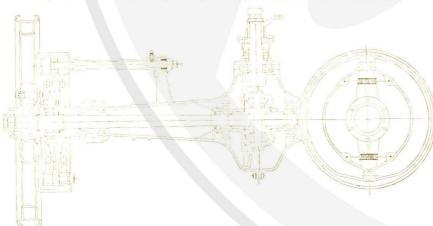
The Gear Box casing is bolted direct to the engine, enclosing the flywheel, electric starter, clutch and clutch withdrawal mechanism in a dust proof housing. The hand brake and change speed levers are mounted on the gear box, their positions being such that the driver's hand falls naturally on them without leaning

or stretching forward. The Star central control is a very substantial job. Four speeds forward and a reverse are fitted with a positive lock for the gears in neutral, and a reverse stop is provided.

The shafts are short and of large diameter, giving that rigidity so necessary for silent running under load. Large ball bearings are fitted, and the gears are made from the highest grade air hardening nickel chrome steel, and are finished by a special process to remove any slight distortion that may take place during heat treatment. The positive speedometer drive is incorporated in the gear box rear bearing housing.

REAR AND R

The rear axle body is of steel, with the brake supporting arms and spring pads formed integral. Spiral bevels are fitted and substantial ball bearings and ball thrusts are provided where necessary. The axle shafts are of nickel chrome steel.



Rear Axle.

The 20/60 h.p. 6-Cyl. STAR Chassis.

SPECIFICATION.—Continued.

FRONT AXLE.

H-section nickel steel stamping, specially designed for front wheel brakes. Ball bearings are provided for the hubs, with hardened steel bushes and ball thrusts for the steering swivels. Hardened steel ball joints are fitted to all steering linkage and are thoroughly protected and easily lubricated. The steering lock enables the car to be turned in a very small circle.

RRAKES

Four-wheel brakes are fitted, those in front being the Lanchester patent, made under licence. The drums are 16" inside diameter, and the shoes are die cast aluminium alloy faced with a special asbestos fabric. The brake pedal operates front and rear brakes together, the braking effort on each axle being in certain proportions which have been determined to a nicety after careful experiment. The hand brake operates an additional pair of shoes in the rear drums. There are thus six brakes on the car.

The adjustment of the four brakes operated by the brake pedal is by means of a small hand wheel situated on the pedal itself, and is readily accessible on lifting the bonnet. (This is an original Star feature, and is a vast improvement on those types which have several adjustments in full view, at the mercy of any inquisitive person who chooses to tamper with them).

STEERING.

The steering gear is of the worm and full-wheel type, both of case hardened steel. Plain bearings and ball thrusts are fitted, the whole being adequately lubricated. Star steering gears are noted for their freeness with absence of slackness.

CONTROL

The usual three pedals are fitted, clutch, brake and accelerator, the latter being fitted with a roller, giving a sensitive feel when operated. Ignition and throttle levers operate on a handsome fixed quadrant above the steering wheel.

FRAME

Pressed nickel steel, deep in section, inswept in front to provide ample steering lock, and upswept over the rear axle for spring movement. A substantial luggage grid is fitted at the rear of the frame.

SPRINGS

Long semi-elliptic type, fitted with very substantial clips. The underslung rear springs take both torque and drive and are carefully proportioned in accordance with the best modern practice. Rebound dampers are fitted to both axles, and the suspension generally is a remarkable combination of smoothness and road holding ability.

WHEELS.

Goodyear detachable steel spoked wheels or Rudge Whitworth detachable wire wheels, at customer's option, a spare wheel and tyre being included.

TYRES.

Dunlop high pressure cord tyres, extra heavy, $31 \times 5^{\circ}25$.

ELECTRICAL EQUIPMENT.

C.A.V. 12 volt system. The dynamo is driven in tandem with the magneto by an accessory drive shaft, and the starter is carried in the flywheel housing. The accumulators are located inside the chassis under the floor boards.

The dynamo and starter being separate units, work on the metallic return or double wire system.

DIMENSIONS

Wheelbase, 11 ft. 3 in. Wheel track, 4 ft. 8 in. Road clearance, 9 in. Overall length, 15 ft. Overall width, 6 ft. Body space, 8 ft. 9 in.

CHASSIS PRICE - £650.

Subject to Terms of Business and Guarantee as printed in the Company's current Catalogues and Order Forms.

EQUIPMENT.

Lighting and Starting Set, comprising —
Dynamo and Motor,
Switch Board,
Battery,
Pair Head Lamps on Pedestal Brackets,
Pair Side Lamps on Wings,
One Tail Lamp,
Dashboard Lamp.

Scuttle Dash with Instrument Board wired and fitted up complete with Lighting and Starting Switches. Speedometer and Clock. Rebound Dampers to both Axles.

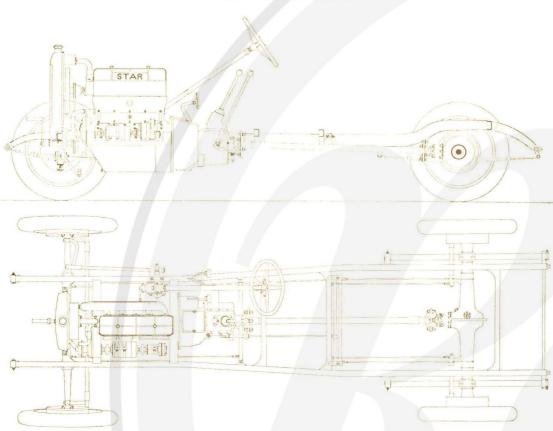
Clock.
Rebound Dampers to both Axles.
Lanchester Patent Four-Wheel Brakes,
Front Wings and Running Boards,
Electric Horn fitted under the bonnet.

Spare Wheel and Tyre. Luggage Grid, Number Plates, Kit of Tools.

Specifications and Prices subject to alteration without notice.

The 14/40 h.p. 4-Cyl. STAR Chassis.

SPECIFICATION.



Chassis Layout.

ENGINE.

OUR-cylinder. Bore 75 m.m. Stroke 120 m.m. Capacity of cylinders 2,120 c.c. Treasury Rating 13.9 h.p. Annual Tax £14.

The cylinders are cast in a single block and a separate head is fitted. The crankcase has a detachable oil base, the crankshaft being carried in the upper half by five bearing caps. The crankshaft is of massive proportions to ensure rigidity and is machined and ground all over

There are two overhead valves in each combustion space, operated by rockers and push rods, gear driven from a single camshaft in the crankcase. Between each cam and tappet in the crankcase a rocker is also fitted. The whole of the valve gear is positively lubricated from the oil pump. The combustion heads are of special formation to promote turbulence and machined all over to close limits to ensure equal compression in all cylinders. The main and big end bearings are phosphor bronze

lined with white metal, and the camshaft bearings at each end are phosphor bronze, the three intermediates being white metal.

A pump of the gear type, located in the oil sump, delivers oil direct to main and camshaft bearings, also feeding oil to the timing gears and the constant level troughs through which the dippers on the big ends of the connecting rods pass and supply oil to the pistons in the form of spray.

IGNITION

Standard high tension magneto, driven in tandem with the dynamo from the rear end of an accessory drive shaft.

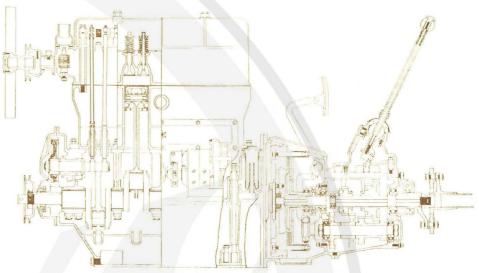
COOLING.

Pump circulation with large honeycomb radiator and belt driven fan. Provision is made for fitting a Thermostat for use in climates which have extreme temperature variation.

(A full description of the Engine will be found on pages 3 and 4.)

The 14/40 h.p. 4-Cyl. STAR Chassis.

SPECIFICATION - Continued.



Engine-Gear Box Unit.

CARBURETTER.

Solex vertical carburetter. Air is drawn through a silencing plate before reaching the carburetter. The petrol feed is by Autovac, drawing its supply from the main tank situated at the rear of the chassis.

CLUTCH.

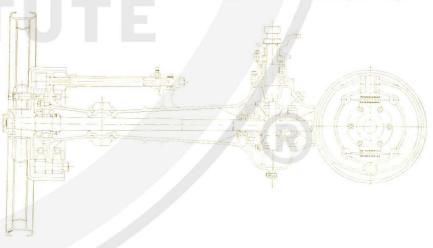
Single dry plate type, carried direct on first motion shaft of the gear box, which spigots into the end of the crankshaft. All misalignment is thus obviated. A very sturdy but simple withdrawal mechanism is fitted, and a clutch stop is incorporated.

GEAR BOX.

The Gear Box casing is bolted direct to the engine, enclosing the flywheel, electric starter, clutch and clutch withdrawal mechanism in a

dust proof housing. The hand brake and change speed levers are mounted on the gear box, their positions being such that the driver's hand falls naturally on them without leaning or stretching forward. The Star central control is a very substantial job. Four speeds forward and a reverse are fitted with a positive lock for the gears in neutral, and a reverse stop is provided.

The shafts are short and of large diameter, giving that rigidity so necessary for silent running under load. Large ball bearings are fitted, and the gears are made from the highest grade air hardening nickel chrome steel, and are finished by a special process to remove any slight distortion that may take place during heat treatment. The positive speedometer drive is incorporated in the gear box rear bearing housing.



Rear Axle.

The 14/40 h.p. 4-Cyl. STAR Chassis.

SPECIFICATION—Continued.

The rear axle body is of steel, with the brake supporting arms and spring pads formed integral. Spiral bevels are fitted and substantial ball bearings and ball thrusts are provided where necessary. The axle shafts are of nickel chrome steel.

H section nickel steel stamping, specially designed for front wheel brakes. Ball bearings are provided for the hubs, with hardened steel bushes and ball thrusts for the steering swivels. Hardened steel ball joints are fitted to all steering linkage and are thoroughly protected and easily lubricated. The steering lock enables the car to be turned in a very small circle.

Four-wheel brakes are fitted, those in front being the Lanchester patent, made under licence. The drums are 12 in. inside diameter, and the shoes are die cast aluminium alloy faced with a special asbestos fabric. The brake pedal operates front and rear brakes together, the braking effort on each axle being in certain proportions which have been determined to a nicety after careful experiment. The hand brake operates an additional pair of shoes in the rear drums. There are thus six brakes on the car.

The adjustment of the four brakes operated by the brake pedal is by means of a small hand wheel situated on the pedal itself, and is readily accessible on lifting the bonnet. (This is an original Star feature, and is a vast improvement on those types which have several adjustments in full view, at the mercy of any inquisitive person who chooses to tamper with them).

The steering gear is of the worm and full wheel type, both of case hardened steel. Plain bearings and ball thrusts are fitted, the whole being adequately lubricated. The steering gears are noted for their freeness with absence of slackness.

poard Lamp.

The usual three pedals are fitted, clutch, brake and accelerator, the latter being fitted with a roller, giving a sensitive feel when operated. Ignition and throttle levers operate on a handsome fixed quadrant above the steering wheel.

Pressed nickel steel, deep in section, inswept in front to provide ample steering lock, and upswept over the rear axle for spring movement. A substantial luggage grid is fitted at the rear of the frame.

Long semi-elliptic type, fitted with very substantial clips. The underslung rear springs take both torque and drive and are carefully proportioned in accordance with the best modern practice. Rebound dampers are fitted to both axles, and the suspension generally is a remarkable combination of smoothness and road holding ability.

Goodyear detachable steel spoked wheels are fitted as standard, a spare wheel and tyre being included. Detachable wire wheels can be fitted at an extra charge.

765 × 105 Dunlop Cord.

C.A.V. 12 volt system. The dynamo is driven in tandem with the magneto by an accessory drive shaft, and the starter is carried in the flywheel housing. The accumulators are located inside the chassis under the floor

The dynamo and starter being separate units, work on the metallic return or double wire

Wheelbase 10 ft., wheel track, 4 ft. 8 in., road clearance, 9 in. Overall length, 13 ft. 4 in. Overall width, 6 ft. Body space, 8 ft.

CHASSIS PRICE - £400.

Subject to Terms of Business and Guarantee as printed in the Company's current Catalogues and Order Forms.

Scuttle Dash with Instrument Board Wired and fitted up complete with Lighting and Starting Switches, Speedometer and Clock. Lighting and Starting Set, comprising— Dynamo and Motor. Switch Board. Battery. Pair Head Lamps on Pedestal Brackets-Pair Side Lamps on Wings. One Tail Lamp.

pare Wheel and Tyre.

Specifications and Prices subject to alteration without notice.

and Clock.
Rebound Dampers to both Axles.
Lanchester Patent Four-Wheel Brakes.
Front Wings and Running Boards,
Electric Horn fitted under the bonnet.

