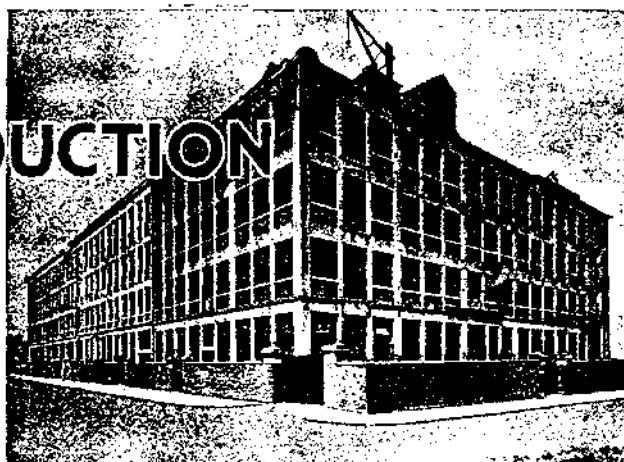




# INTRODUCTION



The 1936 "Matchless" Motorcycles described in the following pages represent the culmination of thirty-six years' experience in the design and manufacture of motorcycles by the "Matchless" organisation. The first "Matchless" motorcycle was made in 1899 by the two brothers—H. A. and C. R. Collier, who later became famous as the champion motorcyclists in England and winners of three T.T. Races. The small workshop in which that first "Matchless" was made has now grown into the great Factory illustrated above, and during the whole of the intervening period the main energies of the organisation have been devoted to the manufacture of high-grade motorcycles and motorcycle engines.

A satisfactory motorcycle cannot just be designed on paper by a mere theorist. To produce a machine which will stand the strain of high speed on bad or indifferent roads it is necessary that the designer should have wide experience and practical knowledge, and it is in these points that "Matchless" designers score. It is no idle boast that "Matchless" motorcycles are made by motorcyclists for motorcyclists.

"Matchless" motorcycles have proved their worth in reliability trials of every description throughout the World. In the 1935 International Six Days' Trial held in September, 1935, which was generally agreed to be the most strenuous test which has ever been held, two 1936 "500 Clubman" Matchless machines completed the whole course without losing a single mark and were awarded International Gold Medals. The same reliability, durability and high performance are built into every 1936 "Matchless," while the "Clubman" series of machines are outstanding for their perfect steering and road-holding qualities and their high speed capabilities, as well as for their handsome appearance and complete specifications.

The "Tourist" range consists of three Models with engines of 250 c.c., 500 c.c., and 990 c.c. capacity, designed to meet the needs respectively of the man who needs a solo machine capable of going anywhere, but without ultra high speed capacity (the "250 Tourist"); the long-distance tourist, either solo or with sidecar (the "500 Tourist"); the Big Twin enthusiast, either as a high speed solo rider or the user of a heavy sidecar (the "990 Tourist").

The detailed specifications given in the following pages will show that every latest scientific development has been incorporated, while carefully avoiding any feature which might be considered experimental or untried. The 1936 "Matchless," as in previous seasons, lead the World in design.

## LIST OF 1936 MODELS

### THE "CLUBMAN" RANGE

This range consists of a series of eight Models designed especially to meet the needs of the clubman and the keen sporting rider.

		£	s.	d.
Page 4.	" 250 " Clubman ... ..	39	10	0
" 5.	" 250 " Clubman De Luxe ... ..	42	10	0
" 6.	" 350 " Clubman ... ..	52	10	0
" 7.	" 350 " Clubman Special ... ..	57	10	0
" 8.	" 500 " Clubman ... ..	55	0	0
" 8.	" 500 " Super Clubman ... ..	60	0	0
" 9.	" 500 " Clubman Special ... ..	60	0	0
" 9.	" 500 " Super Clubman Special ... ..	65	0	0

### THE "TOURIST" RANGE

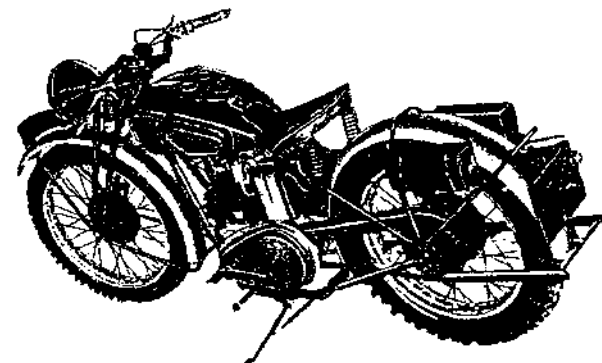
The "Tourist" Models have side-valve engines of the very latest design with enclosed valve gear and dry sump lubrication. They are eminently suitable for every-day utility riding, since they possess great reliability and require little maintenance to keep them in the best possible condition.

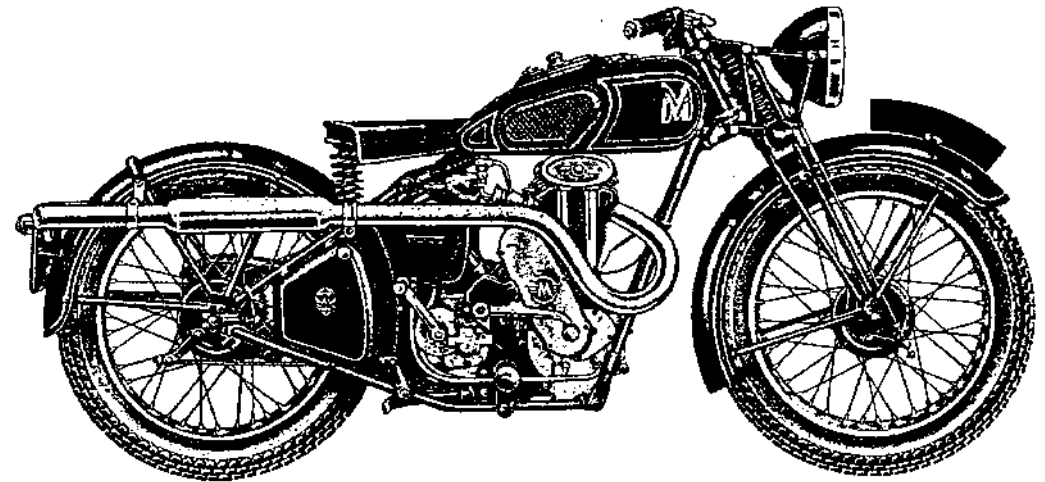
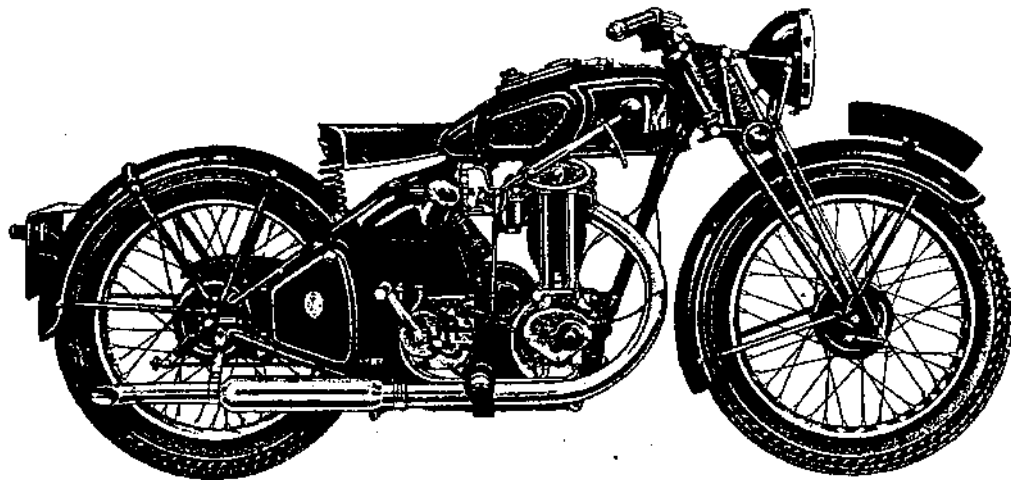
Page 10.	" 250 " Tourist ... ..	34	Guineas
" 11.	" 500 " Tourist ... ..	£51	0 0
" 12.	" 990 " Tourist ... ..	69	15 0
" 12.	" 990 " Tourist De Luxe ... ..	73	10 0

### SPECIAL FINISH

Any 1936 "Matchless" Model, except the "250" Tourist, can be supplied in special Aldwych Red and Chromium finish as described on Page 13.

*This illustration shows the neat and effective single arm prop stand which is fitted to the "350" and "500" Clubman Special Models. Also visible is the handsome instrument panel which is fitted on top of the petrol tanks on all Models except the "250" Tourist and the "990" Tourist.*





**"250" CLUBMAN—MODEL 36/G2 £39 . 10 . 0**

**"250" CLUBMAN DE LUXE—Model 36/G2M £42 . 10 . 0**

**SPECIFICATION**

**SPECIFICATION—continued**

**ENGINE.** High-efficiency 2.46 h.p. O.H.V. sports engine with down-draught inlet port; enclosed overhead-valve gear, "Lo-ex" piston, double camshaft timing gear running in oil-bath, single-port cylinder head with deep finning on head and cylinder barrel, handlebar-operated exhaust valve lifter. Bore 62.5 mm. Stroke 80 mm. Capacity 246 c.c.

**LUBRICATION.** Full dry sump system, oil pressure fed to all working parts, including cylinder wall, big end bearing, mainshaft bearing and camshaft bearing, by duplex horizontal reciprocating rotary plunger pump. Surplus oil sucked from crankcase sump and returned to oil tank through fabric filter which entirely removes all impurities.

**CARBURETTER.** "Amal" with horizontal mixing chamber.

**GEARBOX.** Four-speed pivot-mounted gearbox. Hand gear change standardized, but positive stop foot gear change can be supplied at 12s. 6d. extra.

**TRANSMISSION.** Front chain enclosed in oil-bath chaincase, rear chain protected by adequate guard with back panel. Shock absorber on engine shaft.

**EXHAUST SYSTEM.** Low exhaust pipe as illustrated is standardized, but upswept competition exhaust pipe can be supplied at option without extra charge if foot gear change is specified.

**STAND.** Spring-up centre prop stand.

**TANKS.** Large bulbous pressed steel petrol tank of new design; capacity 3 gallons. Graceful design separate oil tank carried below saddle; capacity 1/2 gallon.

**FRAME.** New design duplex cradle frame with triangulated straight twin down tubes.

**SPRING FORKS.** Tubular spring forks of graceful and sturdy design with adjustable shock absorbers.

**BRAKES.** Internal expanding brakes on both wheels with finger adjustment.

**HANDLEBARS.** 1 in. diameter "clean" handlebars with integral control fittings. Twist grip control for throttle.

**SADDLE.** Lycett "Aero" spring seat.

**TYRES.** 26 in. x 3.25 in. Cord.

**LUGGAGE CARRIER.** Detachable luggage carrier 15s. extra.

**ELECTRICAL EQUIPMENT.** 6-volt electric lighting and coil ignition system. 30-watt dynamo rigidly mounted on engine plates and driven by roller chain enclosed in main oil-bath chaincase. Contact breaker built into engine timing case. Large head-lamp with parking light and with dipping switch on handlebar. Flush-fitting instrument panel in tank carrying switch, ammeter and ignition warning light and with provision

for fitting of clock if required. Extra large battery carried on special platform beneath saddle. Electric horn.

**FINISH.** Petrol tank finished in glossy black enamel with gold lines and chromium-plated embossed "M" on each side. Chromium-plated wheel rims to both wheels and all usual bright parts heavily chromium-

plated. Special Aldwych Red and Chromium finish £2 10s. 0d. extra.

Price. Code Word

"250" Clubman (Model 36/G2), complete with electric lighting and electric horn ... .. £39 10 0 YENKA

**"250" CLUBMAN DE LUXE—Model 36/G2M**

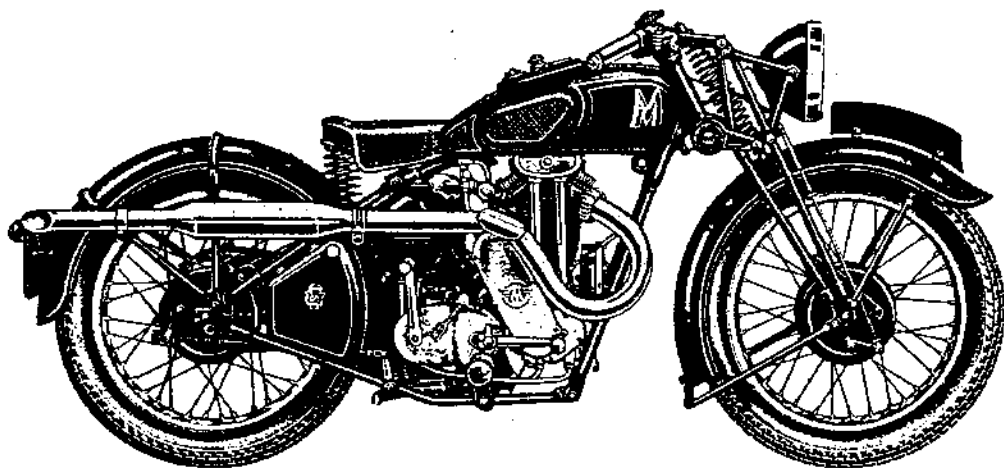
This Model is similar in all respects to the standard "250" Clubman described above with the exception of the electrical equipment, and the provision of steering damper.

On the "De Luxe" Model ignition is by a separate high tension magneto mounted in a protected position behind the engine and driven by chain enclosed in a cast aluminium chaincase formed integral with the engine timing cover. The lighting system consists of a large 6-volt separate dynamo driven by a roller chain enclosed in the main oil-bath chaincase. Special provision is made for the lubrication of this chain, which will run for at least 10,000 miles without adjustment so long as the correct oil level is maintained in the chaincase. The flush-fitting instrument panel on the top of the tank contains the switch, ammeter and space for a clock (30s. extra), together with a detachable inspection lamp which also serves to illuminate the ammeter for night riding purposes. A large "Lucas" head-lamp is fitted with parking light and with dipping switch on handlebar. The "Lucas" tail-lamp is mounted on the rear number plate and an electric horn is fitted.

Price Code Word

"250" Clubman De Luxe (Model 36/G2M), complete with electric lighting and electric horn ... .. £42 10 0 YENLE

When ordering either of these Models please specify clearly whether high or low exhaust pipe and hand or foot gear change are required.



**"350" CLUBMAN—MODEL 36/G3 £52.10.0**

**SPECIFICATION**

**ENGINE.** High-efficiency 3.47 h.p. O.H.V. sports engine with down-draught inlet ports, enclosed overhead-valve gear, hairpin valve springs. "Lo-ex" piston, double camshaft timing gear running in oil bath, extra stiff crankshaft assembly with large double row roller big end bearing running on 1½ in. diameter crankpin. Mainshaft carried on two journal ball bearings on driving side and flood-lubricated bronze bearing on timing side. Single-port cylinder head with exceptionally deep finning on head and on cylinder barrel. Engine mounted vertically in frame. Handlebar-operated exhaust valve lifter. Compression ratio 6.5 to 1. Bore 69 mm. Stroke 93 mm. Capacity 347 c.c.

**LUBRICATION.** Full dry sump system, oil pressure fed to all working parts, including cylinder wall, big end bearing, mainshaft bearing and camshaft bearing, by duplex horizontal reciprocating rotary plunger pump. Surplus oil sucked from crankcase pump and returned to oil tank through fabric filter which entirely removes all impurities.

**CARBURETTER.** 1 in. bore "Amal" carburetter with horizontal mixing chamber.

**IGNITION.** Separate "Lucas" high tension magneto driven by chain enclosed in cast-aluminium chaincase.

**GEARBOX.** Heavyweight pivot-mounted four-speed gearbox with special easy-change dogs. Built-in positive stop foot gear control with adjustable pedal and neutral

indicator. Gear ratios: 5.73, 7.4, 8.7, 15.4.

**TRANSMISSION.** Oil-bath front chaincase. Heavy ½ in. x ¾ in. rear chain, protected by effective guard with back panel. Shock absorber on engine shaft.

**EXHAUST SYSTEM.** Large diameter high-level exhaust pipe with tubular silencer. Low exhaust pipe optional without extra charge if specially mentioned on order.

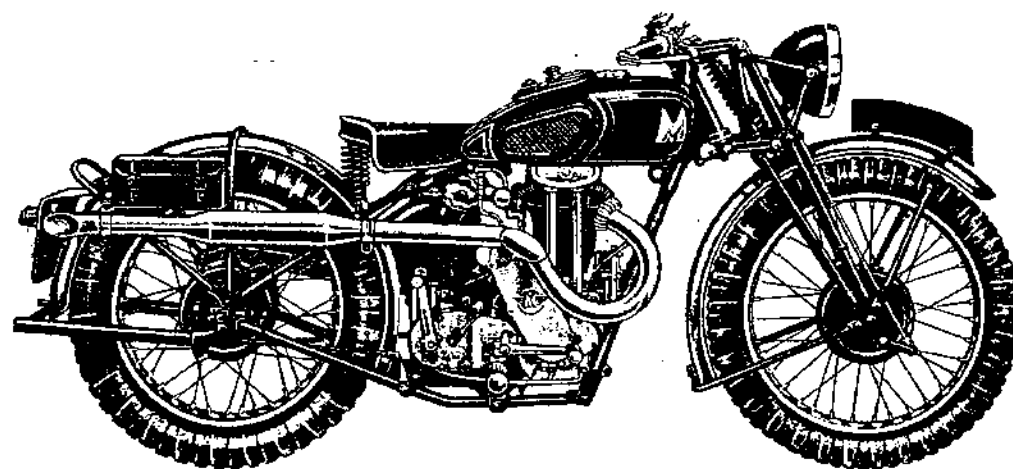
**FRAME.** Heavyweight duplex cradle frame with triangulated straight twin down tubes, narrow angle, providing exceptionally rigid mounting for power unit and great lateral stiffness to ensure perfect steering qualities.

**STANDS.** Spring-up centre stand arranged so that when in the "up" position it does not reduce the ground clearance of the machine. Separate front wheel stand.

**TANKS.** Large bulbous pressed steel petrol tank of new design; capacity 3 gallons. Graceful design, separate oil tank carried below saddle; capacity ½ gallon.

**HANDLEBARS.** Comfortable semi-sports handlebars carried on special shock absorbing rubber mounting, designed to give perfect lateral control, with rotational flexibility damping out all shocks which would otherwise be transmitted to the rider's wrists.

**SPRING FORKS.** Latest type with heavy-weight round taper tube girders, designed to give long spring motion ensuring extreme comfort and good road holding. Finger-adjusted shock absorbers and steering damper.



**"350" CLUBMAN SPECIAL—Model 36/G3C £57.10.0**

**SPECIFICATION—continued**

**BRAKES.** "Matchless" chromidium brakes with finned drums on both wheels. Finger adjustment and quick detachable rods to allow of easy wheel removal.

**MUDGUARDS.** Deep section with flared ends, finished black with gold lines. Rear guard quickly detachable for tyre repairs.

**SADDLE.** Large Lycett "Aero" spring seat with semi-roll back.

**TYRES.** 26 in. x 3.25 in. Cord.

**LUGGAGE CARRIER.** Detachable luggage carrier—15s. extra.

**TOOL-BOX.** Large pressed steel tool-box, weatherproof and having ample capacity.

**ELECTRICAL EQUIPMENT.** Electric lighting provided by 30-watt "Lucas" dynamo mounted in protected position behind engine and driven by chain

enclosed in oil-bath chaincase. Flush-fitting instrument panel mounted on top of tank with inspection lamp, ammeter, switches and provision for clock. Large head lamp with parking light, and dipping device controlled by knurled ring on left handlebar. High-frequency electric horn operated by button switch on right handlebar.

**FINISH.** Black and chromium with gold lines and embossed "M" on tank. Chromium-plated wheel rims. Aldwych Red and Chromium finish £2 10s. 0d. extra.

Price. Code Word

"350" Clubman (Model 36/G3), complete with electric lighting and electric horn ... .. £52 10 0 YENNO

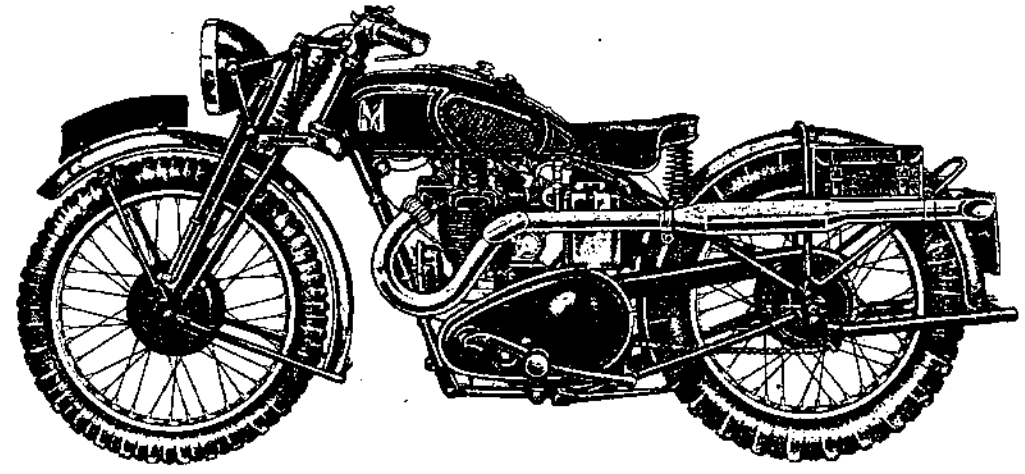
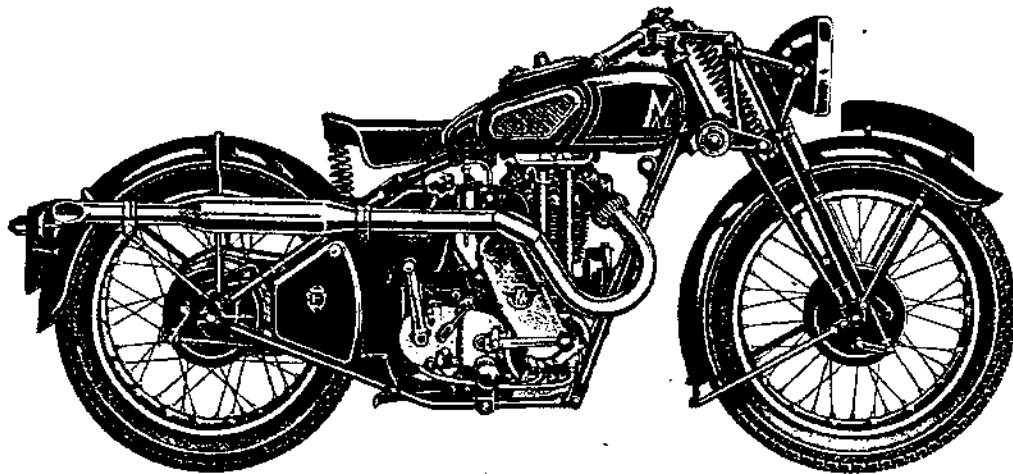
**"350" CLUBMAN SPECIAL—Model 36/G3C**

This is a specially equipped edition of the standard "350" Clubman described above. The special equipment is designed to make the machine ideal for use in reliability trials, scrambles, etc., and incorporates the undermentioned features:—

Special front fork springing with check springs. Increased steering lock. Special shallow-section mudguards. Twin pannier tool-boxes on rear wheel arch in place of standard pressed steel tool-box. Bolted-up rear stand and single arm spring return prop stand, instead of spring-up centre stand as used on the standard "Clubman." Crankcase shield. 26 in. x 3 in. Sports or Solo Sports front tyre. 27 in. x 4 in. Sports rear tyre. Adjustable handlebars mounted on adjustable rearward extensions. Adjustable saddle spring mounting. Adjustable bolted-on control levers. Special competition ratio gearbox. Gear ratios: 6.1, 9.25, 12.5, 19.5. Specially tuned engine with polished cylinder head and ports.

Price. Code Word

"350" Clubman Special (Model 36/G3C), complete with electric lighting and electric horn ... .. £57 10 0 YENUP



**"500" CLUBMAN—MODEL 36/G80 £55 . 0 . 0**

**"500" CLUBMAN SPECIAL—Model 36/G80C £60 . 0 . 0**

**ENGINE.**—This Model is fitted with an improved edition of the famous "Sports 500" power unit. The high-efficiency 4.98 h.p. O.H.V. Sports engine has a down-draught inlet port, enclosed and mechanically lubricated valve gear (with feed to inlet valve guide), "Lo-ex" piston, double camshaft timing gear running in oil-bath, extra stiff crankshaft assembly with large double row big end bearing running on 1 1/2 in. diameter crankpin. Mainshaft carried on two journal ball bearings on driving side and flood-lubricated bronze bearing on timing side. Two-pore cylinder head with very deep finning on head and on cylinder barrel. Handlebar-operated exhaust valve lifter. Compression ratio 6.2 to 1. Bore 82.5 mm. Stroke 93 mm. Capacity 498 c.c.

On the "Super" Clubman Model the compression ratio is 7.5 to 1, and cylinder head, ports, connecting rod, flywheels, etc., are highly polished and the engine is specially tuned. The "Super" engine is fitted with a 14 mm. sparking plug.

**LUBRICATION.** Full dry sump system, oil pressure fed to all working parts, including cylinder wall, big end bearing, mainshaft bearing and camshaft bearing, by duplex horizontal reciprocating rotary plunger pump. Surplus oil sucked from crankcase sump and returned to oil tank through fabric filter which entirely removes all impurities.

**CARBURETTOR.** 1 in. bore "Amal" carburettor with horizontal mixing chamber.

**IGNITION.** Separate "Lucas" high tension magneto driven by chain enclosed in cast-aluminum chaincase.

**GEARBOX.** Heavyweight pivot-mounted four-speed gear-box with special easy-change dogs. Built-in positive stop foot gear control with adjustable pedal and neutral indicator. Gear ratios: 4.08, 6.2, 7.4, 13.1.

**TRANSMISSION.** Oil-bath front chaincase. Heavy 1/2 in. x 3/4 in. rear chain, protected by effective guard with back panel. Shock absorber on engine shaft.

**EXHAUST SYSTEM.** Large diameter high-level exhaust pipes with tubular silencers. Low exhaust pipes optional without extra charge if specially mentioned on order.

**FRAME.** Heavyweight duplex cradle frame with triangulated struts, twin down tubes, narrow angle, providing exceptionally rigid mounting for power unit and great lateral stiffness to ensure perfect steering qualities.

**STANDS.** Spring-up centre stand arranged so that when in the "up" position it does not reduce the ground clearance of the machine. Separate front wheel stand.

**TANKS.** Large bulbous pressed steel petrol tank of new design; capacity 3 gallons. Gracious design separate oil tank carried below saddle; capacity 1/2 gallon.

**HANDLEBARS.** Comfortable semi-sports handlebars carried on special shock absorbing rubber mounting, designed to give perfect lateral control, with rotational flexibility damping out all shocks which would otherwise be transmitted to the rider's wrists.

**SPRING FORKS.** Latest type with heavyweight round taper tube girders, designed to give long spring motion ensuring extreme comfort and good road holding. Finger-adjusted shock absorbers and steering damper.

**BRAKES.** "Matchless" chromium brakes with finned drums on both wheels. Finger adjustment and quick detachable rods to allow of easy wheel removal.

**MUDGUARDS.** Deep section with flared ends, finished black with gold lines. Rear guard quickly detachable for tyre repairs.

**SADDLE.** Large Lycett "Aero" spring seat with semi-roll back.

**TYRES.** 26 in. x 3.25 in. Cord.

**LUGGAGE CARRIER.** Detachable luggage carrier—15x extra.

**TOOL-BOX.** Large pressed steel tool-box, weather-proof and having ample capacity.

**ELECTRICAL EQUIPMENT.** Electric lighting provided by 30-watt "Lucas" dynamo mounted in protected position behind engine and driven by chain enclosed in oil-bath chaincase. Flush-fitting instrument panel mounted on top of tank with inspection lamp, ammeter, switches and provision for clock. Large head lamp with parking light, and dipping device controlled by knurled ring on left handlebar. High-frequency electric horn operated by button switch on right handlebar.

**FINISH.** Black and chromium with gold lines and embossed "M" on tank. Chromium-plated wheel rims. Aldwych Red and Chromium finish £2 10s. 0d. extra.

"500 Clubman" (Model 36/G80), complete with electric lighting and electric horn ... £55 0 0 YE0XY

"500" Super Clubman (Model 36/G90), complete with electric lighting and electric horn ... £60 0 0 YEPAL

**"500" SUPER CLUBMAN—Model 36/G90**

Price. Code Word

This Model is identical with the standard "500" Clubman described above, but is fitted with the high compression specially tuned and polished engine mentioned under the heading of "Engine" in above specification.

**SPECIFICATION**

This is a specially equipped edition of the standard "500" Clubman described on p. 8. The special equipment is designed to make the machine ideal for use in reliability trials, scrambles, etc., and incorporates the under-mentioned features:—

- Special front fork springing with check springs.
- Increased steering lock.
- Special shallow-section mudguards.
- Twin pannier tool-boxes on rear wheel arch in place of standard pressed steel tool-box.
- Bolted-up rear stand and single arm spring return prop stand, instead of spring-up centre stand as used on the standard "Clubman."
- Crankcase shield.

26 in. x 3 in. Sports or Solo Sports front tyre.  
27 in. x 4 in. Sports rear tyre.  
Adjustable handlebars mounted on adjustable rearward extensions.  
Adjustable saddle spring mounting.  
Adjustable bolted-on control levers.  
Special competition ratio gearbox.  
Gear ratios: 5.14, 7.8, 11.5, 16.4.  
Specially tuned engine with polished cylinder head and ports.

Price. Code Word

"500" Clubman Special (Model 36/G80C), complete with electric lighting and electric horn ... £60 0 0 YEPem

**"500" SUPER CLUBMAN SPECIAL—Model 36/G90C**

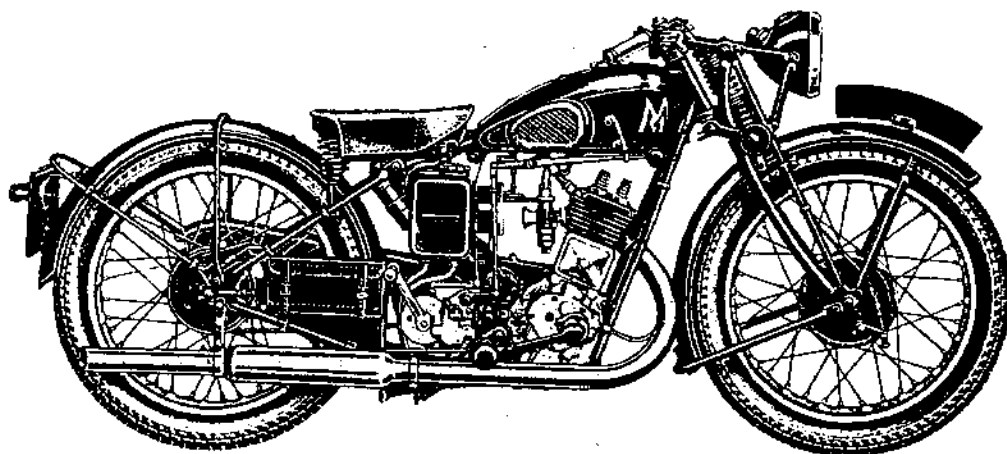
Price. Code Word

This is the "500" Clubman Special fitted with the "Super" Clubman engine with high compression ratio and 14 mm. sparking plug, etc., mentioned on previous page.

"500" Super Clubman Special (Model 36/G90C), complete with electric lighting and electric horn ... £65 0 0 YEPOp

All "500" Clubman Models are supplied only with positive stop foot gear change, but high or low exhaust pipes are optional on the Standard Models. On the Special Models high exhaust pipes only can be fitted.

Please specify clearly which type of exhaust pipes is required.



## "250" TOURIST—MODEL 36/F7 34 Guineas

### SPECIFICATION

**ENGINE.** "Matchless" 2.46 h.p. high-efficiency four-stroke side-valve, with enclosed valves. Bore 62.5 mm. Stroke 80 mm. Capacity 246 c.c.

**LUBRICATION.** "Matchless" dry sump system with pressure feed to all working parts, and fabric oil filter. Cycle parts lubricated by grease gun.

**GEARBOX.** Pivot-mounted four-speed gear with clutch and kick-starter.

**TRANSMISSION.** By chain throughout. Front chain enclosed in oil-bath chaincase and rear chain protected by adequate guard.

**STANDS.** Spring-up centre prop stand. Separate tubular stand for front wheel.

**TANKS.** Bulbous saddle tank for petrol; capacity 2 gallons. Separate oil tank under saddle; capacity 3 pints.

**FRAME.** Unbreakable duplex cradle frame of great strength.

**SPRING FORKS.** Compression spring type with adjustable shock absorbers.

**BRAKES.** Internal expanding on both wheels with finger-adjustment.

**MUDGUARDS.** Wide mudguards, front and rear. Rear guard detachable to facilitate tyre repairs.

**SADDLE.** Lycett "Aero" spring seat.

**TYRES.** 25 in. x 3 in. Cord.

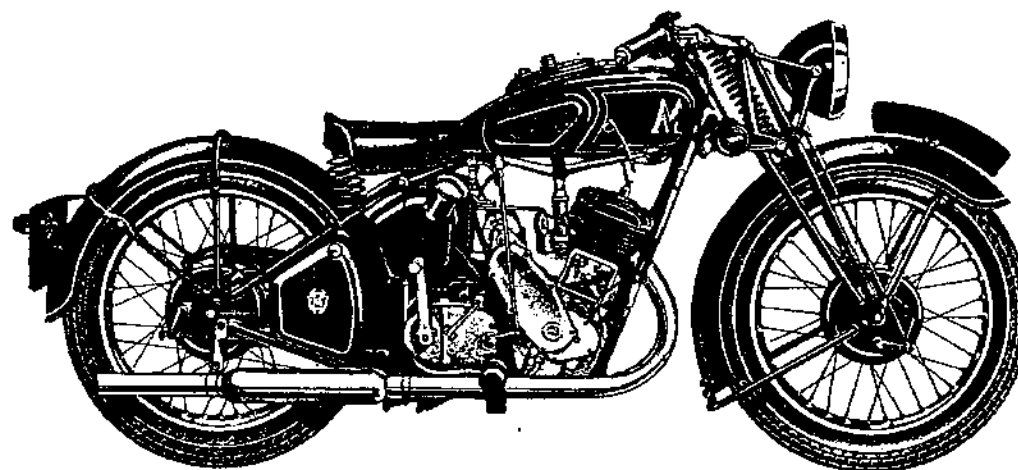
**LUGGAGE CARRIER.** Detachable luggage carrier—15s. extra.

**HANDLEBARS.** Graceful semi-sports "clean" handlebars with integral fittings. Black finish.

**ELECTRICAL EQUIPMENT.** 6-volt electric lighting and coil ignition system. Large size dynamo, giving 30-watts output, rigidly mounted on engine plates and driven direct from crankshaft by roller chain enclosed in main oil-bath chaincase and automatically lubricated. Accessible adjustment provided for chain tension. Contact breaker built into engine timing case. Lighting equipment consists of 6 in. diameter head-lamp with parking light and with dimming switch on handlebar; tail-lamp mounted on rear number plate. The switch, ammeter and warning light showing when ignition is switched on, are mounted on the back of the head-lamp. Extra large battery carried on special platform beneath saddle. Electric horn.

**FINISH.** Petrol tank finished in glossy black enamel with gold lines and chromium-plated embossed "M" on each side. Chromium-plated strip down centre of tank top. Frame, mudguards, handlebars, etc., stove-enamelled black after special anti-rust process. Wheel rims and all bright parts heavily chromium-plated.

Price. Code Word  
"250" Tourist (Model 36 F7),  
complete with electric lighting  
and electric horn ... .. 34 Guineas YEPZY



## "500" TOURIST—MODEL 36/D5 £51.0.0

### SPECIFICATION

**ENGINE.** High-efficiency four-stroke side-valve engine with cast-type detachable cylinder head and semi-turbulent combustion space. "Lo-ex" piston, double-camshaft timing gear, enclosed valves, handlebar-operated exhaust valve lifter. Bore 82.5 mm. Stroke 93 mm. Capacity 498 c.c.

**LUBRICATION.** Full dry sump system, oil pressure fed to all working parts, including cylinder wall, big end bearing, mainshaft bearing and camshaft bearing, by duplex horizontal reciprocating rotary plunger pump. Surplus oil sucked from crankcase sump and returned to oil tank through fabric filter which entirely removes all impurities.

**IGNITION.** By "Lucas" Magdyno driven by chain enclosed in cast-aluminium chaincase.

**GEARBOX.** Heavyweight pivot-mounted four-speed gearbox with special easy-change dogs. Hand-operated gear control. Gear ratios: 5.1, 6.6, 7.8, 13.7.

**TRANSMISSION.** Oil-bath front chaincase. Heavy 2 in. x 2 in. rear chain, protected by effective guard with back panel. Shock absorber on engine shaft.

**FRAME.** Heavyweight duplex cradle frame providing inclined mounting for the engine and giving great lateral rigidity.

**STANDS.** Spring-up centre stand and separate front wheel stand.

**TANKS.** Large bulbous pressed steel petrol tank of new design; capacity 3 gallons. Graceful design separate oil tank carried below saddle; capacity 3/4 gallon.

**HANDLEBARS.** Comfortable semi-sports handlebars carried on special shock absorbing rubber mounting, designed to give perfect lateral control, with rotational flexibility damping out all shocks which would otherwise be transmitted to the rider's wrists.

**SPRING FORKS.** Latest type with heavyweight round taper tube girders, designed to give long spring motion ensuring extreme comfort and good road holding. Finger-adjusted shock absorbers and steering damper.

**BRAKES.** "Matchless" chromidium brakes with finned drums on both wheels. Finger adjustment and quick detachable rods to allow of easy wheel removal.

**MUDGUARDS.** Deep section, finished black with gold lines. Rear guard quickly detachable for tyre repairs.

**SADDLE.** Large Lycett "Aero" spring seat with semi-roll back.

**TYRES.** 26 in. x 3.25 in. Cord.

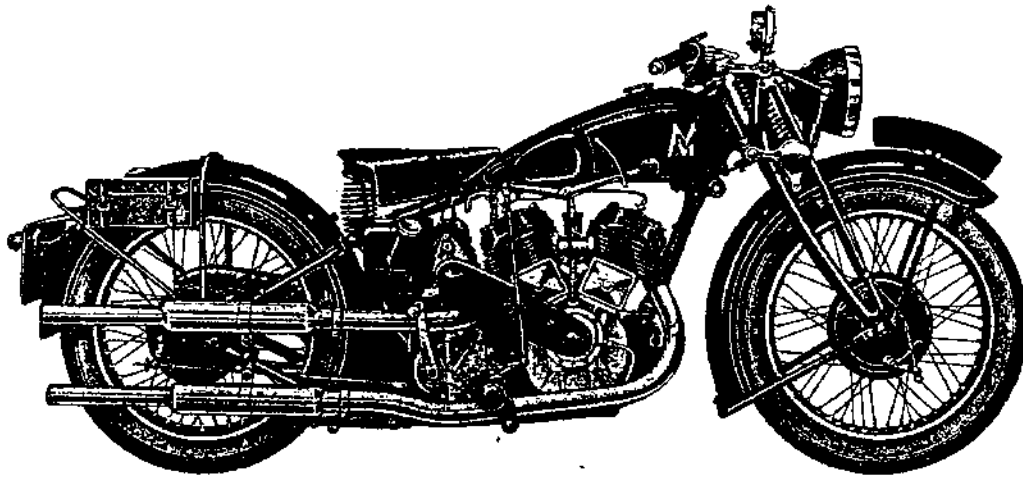
**LUGGAGE CARRIER.** Detachable luggage carrier—15s. extra.

**TOOL-BOX.** Large pressed steel tool-box, weather-proof and having ample capacity.

**ELECTRICAL EQUIPMENT.** "Lucas" Magdyno electric lighting and ignition system. Flush-fitting instrument panel mounted on top of tank with inspection lamp, ammeter, switches and provision for clock. Large head-lamp with parking light, and dipping device controlled by knurled ring on left handlebar. High-frequency electric horn operated by button switch on right handlebar.

**FINISH.** Black and chromium with gold lines and embossed "M" on tank. Chromium-plated wheel rims. Aldwych Red and Chromium finish £2 10s. 0d extra.

Price Code Word  
"500" Tourist (Model 36 D5),  
complete with electric lighting  
and electric horn ... .. £51 0 0 YERAN



## "990" TOURIST—MODEL 36/X4 £69.15.0

### SPECIFICATION

**ENGINE.** "Matchless" Big-Twin side-valve engine with car-type detachable cylinder heads, enclosed valves, timing gears running in oil-bath, large flywheels to ensure smooth running, exceptionally stiff crankshaft assembly, forked connecting rods. This engine is remarkable for its high power output, silence in operation and vibration-less running. Bore 85.5 mm. Stroke 85.5 mm. Capacity 990 c.c.

**LUBRICATION.** Full dry sump system, oil pressure fed to all working parts, including cylinder wall, big end bearing, mainshaft bearing and camshaft bearing, by duplex horizontal reciprocating rotary plunger pump. Surplus oil sucked from crankcase sump and returned to oil tank through fabric filter which entirely removes all impurities.

**GEARBOX.** Heavyweight pivot-mounted four-speed gearbox with hand gear control. Foot gear control optional at extra charge of 15s.

**TRANSMISSION.** Front chain enclosed in oil-bath chaincase. Rear chain protected by adequate guard with back panel. Shock absorber on engine shaft.

**STANDS.** Spring-up centre stand and separate front stand.

**TANKS.** Extra large petrol tank with capacity of 3½ gallons. Separate oil tank under saddle; capacity 4 pints.

**SPRING FORKS.** Wide heavyweight forks with finger-adjusted shock absorbers and steering damper.

**BRAKES:** 8 in. internal expanding brakes on both wheels, with water-excluders. Rear brake operated by pedal on left side of machine. Front brake operated from handlebar.

**MUDGUARDS.** Deep section, giving exceptional protection against mud. Rear guard quickly detachable for tyre repairs.

**SADDLE.** Large Lycett "Aero" spring seat mounted on long compression springs at rear.

**TYRES.** 26 in. x 3.25 in. Cord. 26 in. x 3.50 in. or 27 in. x 4 in. can be fitted at extra charge.

**LUGGAGE CARRIER.** Detachable luggage carrier—15s. extra.

**FINISH.** Black and chromium with gold lines and embossed chromium "M" on tank. Mudguards on Standard Model gold lined. Wheel rims chromium-plated.

**SPECIFICATION.** This Model can be supplied to either Standard or Police specification. Standard specification includes footrests, semi-sports handlebars, hand clutch and right-hand gear change. Police specification includes footboards, upturned touring handlebars, foot clutch and left-hand gear change.

**ELECTRICAL EQUIPMENT.** "Lucas" Magneto electric lighting and ignition system with switch and ammeter carried on back of head-lamp. The "De-Luxe" Model has an instrument panel mounted above the handlebars, this instrument panel carrying the switch, ammeter and a speedometer, while provision is made for the fitting of a clock if required (30s. extra). The instruments are provided with indirect illumination for night riding. The "De-Luxe" Model specification also includes chromium-edged mudguards and air filter. Both Models include an electric horn.

	Price	Code Word
"990" Tourist (Model 36/X4), to Standard or Police Specification, complete with electric lighting and electric horn ...	£69 15 0	YEREP
Model 36/X4 "De-Luxe" ...	£73 10 0	YEROR

## EQUIPMENT

All the 1936 "Matchless" Models listed in this catalogue are supplied complete with electric lighting, including head and tail lamps, ammeter, etc., and with electric horn, and this equipment is included in the prices shown. All Models, except the "250" Tourist Model 36/F7 and the "990" Tourist Model 36/X4, are fitted with a handsome instrument panel mounted on the top of the petrol tank, the panel carrying the electric lighting switch and the ammeter, and having provision for the fitting of a Smith 8-day clock which can be supplied to order at an extra charge of 30s.

Except in the case of the "250" Clubman Model 36/G2, this panel also incorporates a detachable inspection lamp which serves to illuminate the ammeter for night riding and is also, by reason of the long flex provided, extremely useful for carrying out adjustments, reading maps, etc., at night. On the "250" Clubman Model 36/G2 the inspection lamp is replaced by a warning light which glows red should the ignition be left switched on when the engine is not running, so guarding against any possibility of the battery being accidentally discharged.

On the "990" Tourist Model 36/X4 the switch and ammeter are carried in the back of the head-lamp, but on the "De-Luxe" edition of this Model there is a handsome instrument panel mounted above the handlebars, and this panel contains the switch and ammeter, a speedometer (included in the price), and provision for the fitting of a clock. The instruments are provided with indirect illumination controlled by a switch for night riding.

When a speedometer is ordered on any other model it is mounted on a special bracket in front of the steering damper knob in the centre of the handlebars, in a position where it can easily be read when the machine is in motion without the rider having to remove his vision from the road ahead.

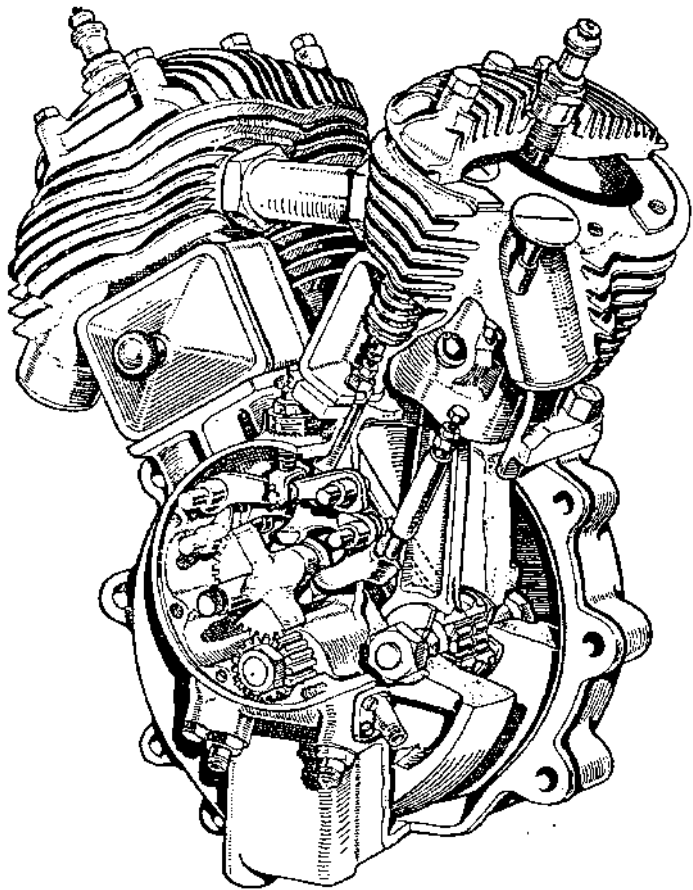
A list is given below of certain optional equipment which can be supplied at extra prices.

### LIST OF OPTIONAL EQUIPMENT

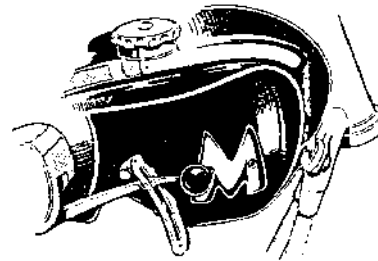
	£	s.	d.
Detachable Luggage Carrier—all Models ... ..	15	0	
8-day Clock (cannot be supplied for Model 36/F7) ... ..	1	10	0
Legshields ... ..	15	0	
Gearbox Drive Speedometer—non-trip ... ..	2	0	0
Gearbox Drive Speedometer—trip ... ..	2	5	0
Lucas Stop-light ... ..	5	0	
Exhaust Pipe Shield for Model 36/G2 or 36/G2M ... ..	3	6	
Pillion Footrests—all Models ... .. (per pair)	7	6	
Mudguard-type Pillion Seat ... ..	12	6	
Hutchinson "De-Luxe" Pillion Seat (for fitting to Luggage Carrier) ... ..	13	6	
Over-size Tyres:—			
26 in. x 3.50 in.—Any Model except 36/F7 ... .. (per machine)	10	0	
27 in. x 4 in.—Model 36/X4 or Model 36/X4 "De-Luxe" only (per machine)	1	0	0

### SPECIAL ALDWYCH RED FINISH

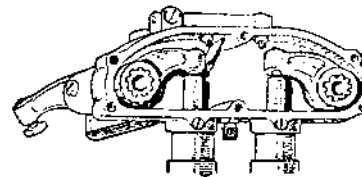
Any "Matchless" motorcycle described in this Catalogue (except Model 36/F7) can be supplied to special order finished in Aldwych Red and Chromium instead of the usual Black and Chromium at an extra charge of £2 10s. 0d. When this finish is specified most of those parts which are normally enamelled in Black are enamelled in a rich shade of Aldwych Red, but a few parts, such as the head-lamp, are chromium-plated instead of being enamelled, in addition, of course, to the usual chromium-plated parts.



This sectional drawing shows clearly the sturdy construction of the "Matchless" Big Twin engine fitted in the Model 36-X4. Special features include the car-type detachable cylinder heads giving a semi-curbulent combustion space, the large valves with smooth inlet and exhaust ports, "Lo-ex" alloy pistons, and full dry sump lubrication. Note the large diameter shafts employed in the crankshaft assembly and the ingenious and simple timing gear which runs in an oil bath. The latest Model has a forked connecting rod with four rows of rollers for the big end bearing. The valves are totally enclosed by quick detachable cover plates. This engine is remarkable for its smooth running and high power output. (Motor Cycling sketch.)

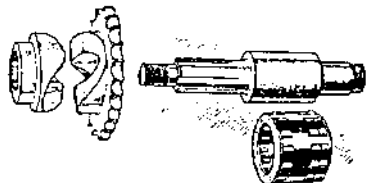


All "Matchless" petrol tanks are distinguished by the embossed chromium "M" which is carried on each side of the tank at the front end. The tank is finished in hard stoved glossy black enamel with gold lines, and a very handsome appearance is given by the contrast between the black enamel and the chromium "M." Note also the way in which the tank is mounted on rubber buffers to absorb vibration.

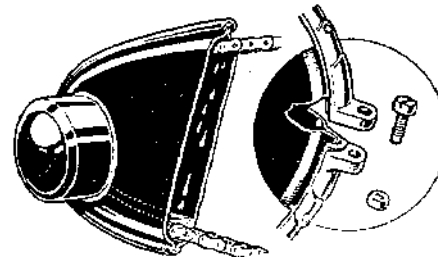
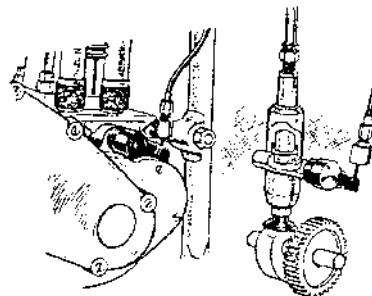


On the "500 Clubman" there is a direct feed of oil from the main oil pump to the overhead rocker gear. Oil is supplied to the rocker shaft bearings, and by means of small jets, which can be seen in the sketch, oil is projected on to the ball ends of the push rods, the oil being fed just where it is needed to ensure silent operation and freedom from wear. In addition, oil is taken from the union which can be seen at the bottom of the rocker casing to the inlet valve guide, an adjustment being provided to enable the supply to the valve guide to be regulated.

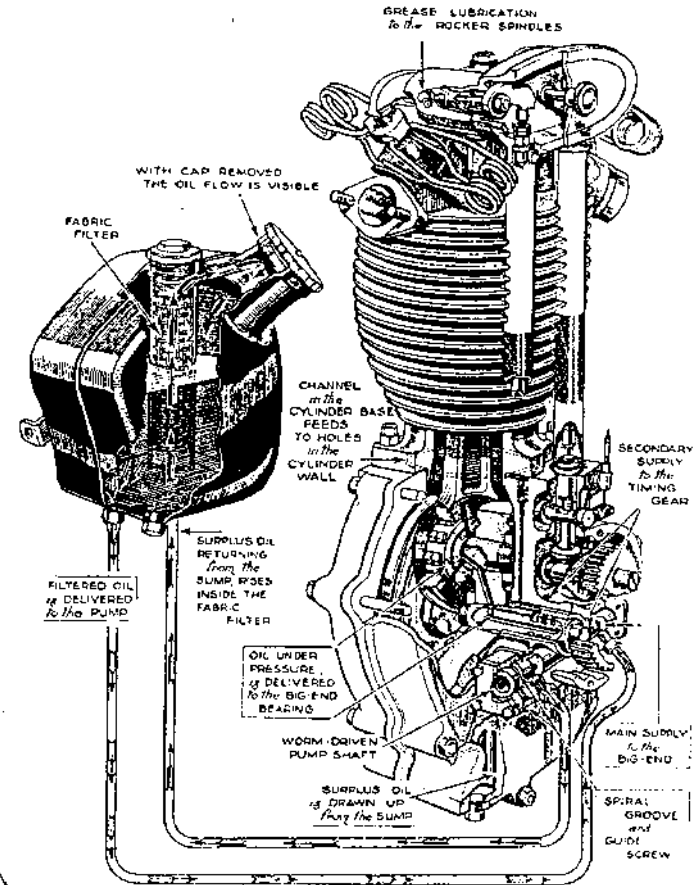
This drawing shows the construction of the simple and efficient exhaust valve lifter used on the single-cylinder "Matchless" engines. As will be seen a rocking lever engages a collar formed on the exhaust valve tappet, so that the mechanism is totally enclosed and there is nothing to wear or get out of order. (Motor Cycle sketch.)



This sketch shows the main shaft used in the "Matchless" big-twin engines and the three-row roller bearing on which it is carried. The transmission shock absorber is carried on the splines formed on the end of the shaft. The shock absorber spring and nut have been omitted for the sake of clearness. (Motor Cycle sketch.)



All 1936 "Matchless" Motorcycles are fitted with an oil-bath case for the front chain, the construction of which is shown in the sketch above. As will be seen the chain actually runs in oil, and this ensures an entire absence of wear and remarkable silence and smoothness in operation. Chain adjustment is required only at very long intervals. The oil-bath case is formed of two steel pressings held together by a clamping band fastened with one nut and bolt, the joint being sealed by a moulded rubber band.



GREASE LUBRICATION To the ROCKER SPINDLES

WITH CAP REMOVED THE OIL FLOW IS VISIBLE

FABRIC FILTER

CHANNEL in the CYLINDER BASE FEEDS TO HOLES in the CYLINDER WALL

SECONDARY SUPPLY to the TIMING GEAR

SURPLUS OIL RETURNING from the SUMP RISES INSIDE the FABRIC FILTER

OIL UNDER PRESSURE is DELIVERED to the BIG-END BEARING

MAIN SUPPLY to the BIG-END

WORM-DRIVEN PUMP SHAFT

SURPLUS OIL is DRAWN UP from the SUMP

SPIRAL GROOVE and GUIDE SCREW

This drawing shows the construction of the "350 Clubman" engine and describes the operation of the dry sump lubrication system which is fitted to all "Matchless" Motorcycles. The rotary reciprocating plunger pump which is driven by the crankshaft draws oil from the oil tank and forces it to all working parts of the engine. Surplus oil falls into the sump at the bottom of the crankcase and from there is drawn up by the return end of the oil pump and delivered again to the oil tank, passing on its way through a fabric filter which completely removes all impurities. Thus a constant circulation of cool, clean oil is ensured, and this is largely responsible for the very long life which is given by all "Matchless" engines.