

1938



NEW IMPERIAL MOTORS LTD., Hall Green, BIRMINGHAM, 11





# NEW IMPERIAL

## FOREWORD

- Whilst the basic design of UNIT CONSTRUCTION and SPRING FRAMES, which has been such a signal success since its inception nearly six years ago, is still preserved, many "new riders" features are incorporated in the "NEW IMPERIAL" 1938 Range.
- The 250 c.c., 350 c.c. and 500 c.c. machines have a number of important changes common to all—briefly, they are :—
  - (1) New shaped panels on tank.
  - (2) Lower saddle position, to give improved riding.
  - (3) New pattern handlebars designed to give the rider easier and better control of his machine. In addition, the front brake lever has been adjusted so that it is exceptionally convenient to operate.
  - (4) Foot Gear change is now standard on all Models, except the "UNIT MINOR" 150 c.c. and the "Light 250" machine. The foot control is of improved type, to suit the rider's individual taste, with a short movement.
  - (5) Single Port Heads are fitted to the "STANDARD UNIT" and "CLUBMAN UNIT" Models. The improved inlet port is a special feature of these heads.
- The "Light 250" (Model 36L) is introduced to meet the demand for a light, handy machine of simple specification, which is capable of giving its owner trouble-free and economical service under all conditions of use. It appeals both to the experienced motor cyclist and to the rider, who desires a better performance than can be obtained from a low-powered lightweight machine.
- Spring Frames are available on all Models (except the "UNIT MINOR" 150 c.c. and the "Light 250") at low extra cost.
- Every "NEW IMPERIAL" is backed by a modern factory, staffed by those who know and appreciate good motor cycles—a modern Service Department eager to help you—a modern outlook exercised for your benefit.

## NEW IMPERIAL MOTORS LIMITED

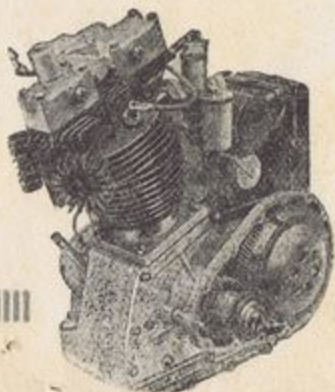
Telephone Nos. :  
SPRINGFIELD 1164 - 5 - 6  
(3 lines).

Telegrams :  
"Peerage, Birmingham."

SPRING ROAD, HALL GREEN,  
BIRMINGHAM, 11

### Directors :

Managing Director - W. R. WHEELER  
Sales Director - A. A. GLOVER  
Works Director - L. S. HORTON  
K. TOMPKINS.



# UNIT CONSTRUCTION



# NEW IMPERIAL



1938 RETAIL PRICES			HIRE PURCHASE TERMS							
MODEL.			"A" INCLUDING COMPREHENSIVE INSURANCE for 12 months for all districts excepting London Postal area, Glasgow and Northern Ireland. (See Notes.)				"B" EXCLUDING INSURANCE.			
			MINIMUM DEPOSIT.	12 Monthly Payments of	18 Monthly Payments of	24 Monthly Payments of	MINIMUM DEPOSIT.	12 Monthly Payments of	18 Monthly Payments of	
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
23	Coil	34 10 0	9 17 6	2 14 4	1 17 10	1 9 8	8 12 6	2 7 6	1 13 1	
23	Maglita	36 15 0	10 10 0	2 17 3	2 0 0	1 11 3	9 5 0	2 10 5	1 15 2	
36	Magdyno	50 10 0	14 5 0	3 18 5	2 14 8	2 2 9	12 12 6	3 9 6	2 8 5	
36	Coil	47 10 0	13 10 0	3 14 3	2 11 9	2 0 6	11 17 6	3 5 4	2 5 6	
36L	Coil	40 0 0	11 12 6	3 4 0	2 4 7	1 14 11	10 0 0	2 15 0	1 18 4	
36L	Maglita	42 5 0	12 3 9	3 7 1	2 6 9	1 16 7	10 11 3	2 18 1	2 0 6	
36	D.L.	54 10 0	15 5 0	4 3 11	2 18 6	2 5 9	13 12 6	3 15 0	2 12 3	
90	...	57 0 0	15 17 6	4 7 4	3 0 11	2 7 8	14 5 0	3 18 5	2 14 8	
46	Magdyno	52 10 0	14 15 0	4 1 2	2 16 7	2 4 3	13 2 6	3 12 3	2 10 4	
46	Coil	49 10 0	14 0 0	3 17 0	2 13 8	2 2 0	12 7 6	3 8 1	2 7 5	
46	D.L.	56 0 0	15 12 6	4 5 11	2 19 11	2 6 11	14 0 0	3 17 0	2 13 8	
100	...	59 10 0	16 10 0	4 10 9	3 3 3	2 9 6	14 17 6	4 1 10	2 17 0	
76	Magdyno	60 10 0	17 12 6	4 16 11	3 7 7	2 12 10	15 2 6	4 3 2	2 18 0	
76	Coil	57 10 0	16 17 6	4 12 10	3 4 9	2 10 8	14 7 6	3 19 1	2 15 1	
76	D.L.	62 0 0	18 0 0	4 19 0	3 9 0	2 14 0	15 10 0	4 5 3	2 19 5	
110	...	63 0 0	18 5 0	5 0 5	3 10 0	2 14 9	15 15 0	4 6 8	3 0 5	

EXTRAS			HIRE PURCHASE TERMS				
Description.			(To be added to Hire Purchase Deposit and Rentals for machine.)				
			MINIMUM DEPOSIT.	12 Monthly Payments of	18 Monthly Payments of	24 Monthly Payments of	
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Rear Stop Light		8 0	2 0	7	5	4	
Speedometer	Non-Trip (80 m.p.h.)	2 5 0	11 3	3 1	2 2	1 9	
"	Trip (80 m.p.h.)	2 10 0	12 6	3 5	2 5	1 11	
"	Non-Trip (120 m.p.h.)	2 10 0	12 6	3 5	2 5	1 11	
"	Trip (120 m.p.h.)	2 15 0	13 9	3 10	2 8	2 1	
Pillion Footrests		7 6	2 0	6	5	4	
Pillion Seat (Mudguard Fixing)		12 6	3 3	10	7	6	
Sprung Carrier, with Pillion Seat		1 15 0	8 9	2 5	1 9	1 4	
Spring Frame		4 0 0	1 0 0	5 6	3 10	3 0	
"	(for use with Sidecar)	4 10 0	1 2 6	6 2	4 4	3 5	
Chrome Tank		17 6	4 6	1 2	10	8	
Leg Shields		15 0	3 9	1 1	9	7	

## NOTES

### INSURANCE PREMIUMS.

For machines garaged within the LONDON POSTAL AREA, GLASGOW and District, and NORTHERN IRELAND, the following amounts **MUST BE ADDED TO THE MONTHLY PAYMENTS QUOTED UNDER "A."**

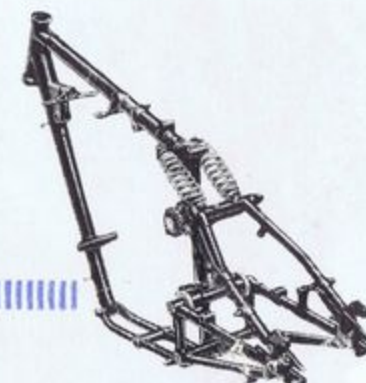
Models	12 Monthly Payments of	18 Monthly Payments of
	s. d.	s. d.
23 ...	1 0	9
36, 36L, 36DL, 90		
46DL, 46, 100 ...	2 0	1 6
76, 76DL, 110 ...	4 0	3 0

Where drivers are below the age of 21 and/or have had less than 12 months' driving experience, the Insurance Premiums included under Table "A" are subject to alteration, details of which will be furnished on application.

Machines which are hired without Insurance "A" must be covered by a Comprehensive Insurance Policy taken out by the Hirer with an Insurance Company to be approved by us, and endorsed.

The **INSURANCE PREMIUMS** included under "A" are for twelve months only, and the **RENEWAL PREMIUM WHEN IT BECOMES DUE**, must be paid by the Hirer.

**THESE RETAIL PRICES AND HIRE PURCHASE TERMS DO NOT APPLY TO THE IRISH FREE STATE OR OVERSEAS COUNTRIES.**



## SPRING FRAMES

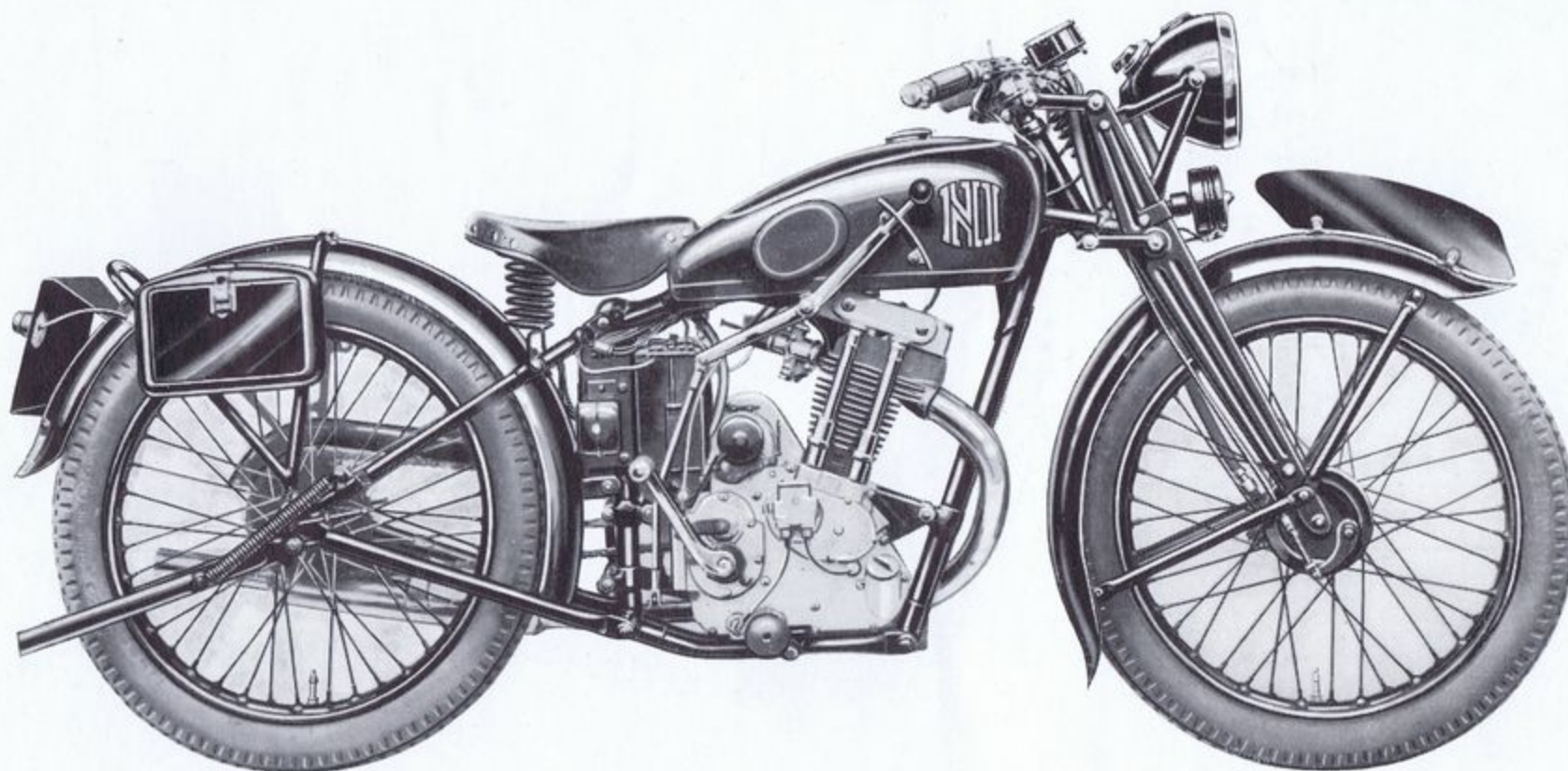
BARTISCOMERS.CO.UK





# NEW IMPERIAL

## MODEL 23



### SPECIFICATION:—

- Engine-Gearbox Unit** - Bore 55 m.m. Stroke 62.5 m.m. Capacity 146 c.c. O.H.V. Single Port Head. Totally enclosed Valve Gear. In UNIT CONSTRUCTION with 3-speed, hand-controlled Gearbox.
- Frame** - - - - Cradle type, 3-point suspension. Rigid frame only supplied.
- Equipment** - - - Lucas 6-volt Coil Lighting and Ignition Set. Compensated Voltage Control (Maglita £2 5s. extra). H.F. Horn, Licence Holder, Pump, Tool Kit. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

(COIL)

PRICES COMPLETE

(MAGLITA)

£34 10 0

£36 15 0

For full specification, see page fifteen.



## UNIT CONSTRUCTION

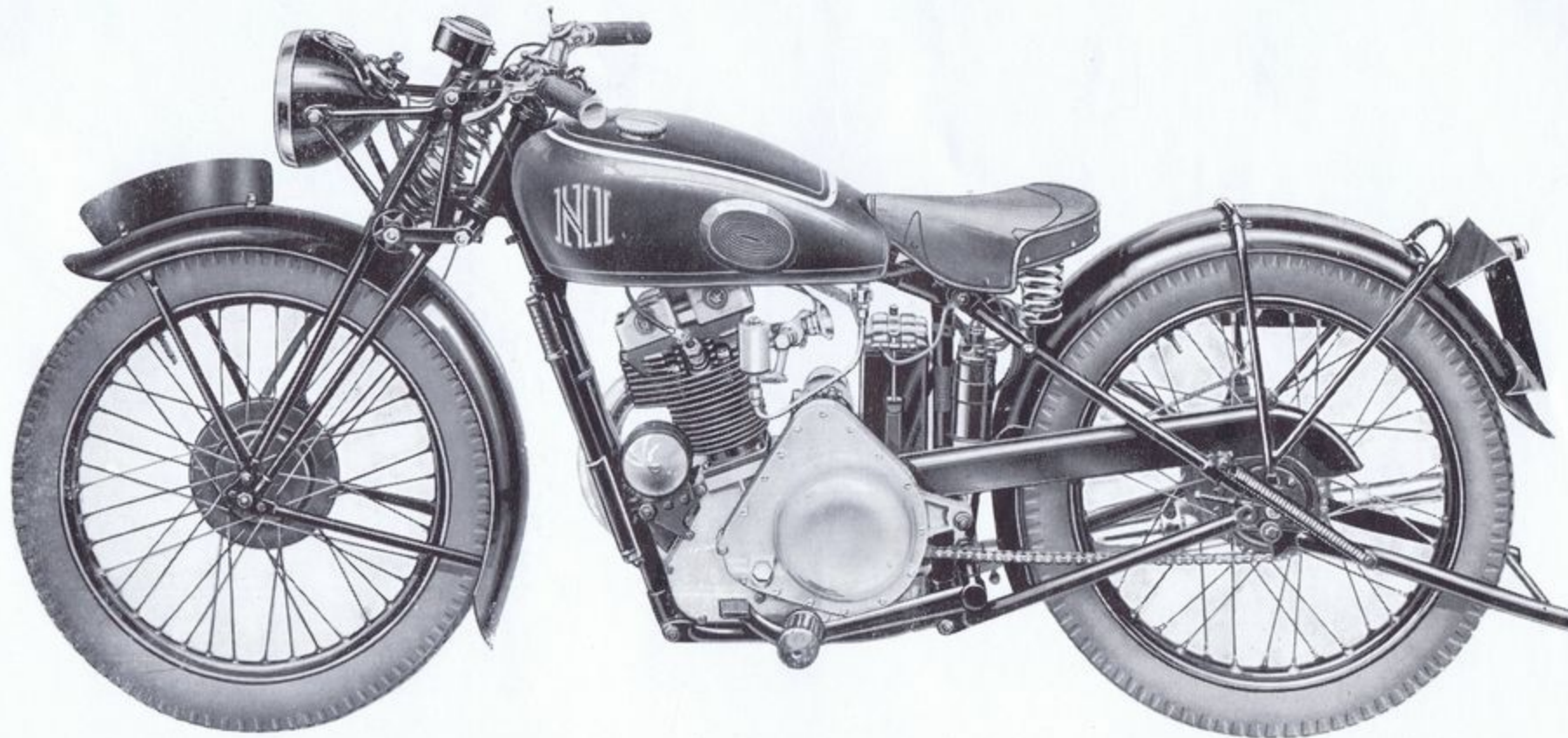
BAHNSCOTMOTORS.CO.UK



# NEW IMPERIAL



## MODEL 36L



### SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 67 m.m., Stroke 70 m.m. Capacity 247 c.c. O.H.V. Single Port Head. Total enclosure to Rocker Box. In UNIT CONSTRUCTION with 3-Speed, hand-controlled Gearbox.
- Frame** - - - - Cradle type. 3-point suspension. Rigid Frame only supplied.
- Equipment** - - - Lucas 6-volt Coil Lighting and Ignition Set. Compensated Voltage Control. (Maglita £2 5s. extra.) H.F. Horn. Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

(COIL)

£40 0 0

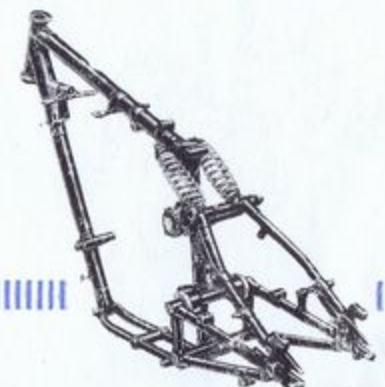
PRICES COMPLETE

(MAGLITA)

£42 5 0

For full specification, see page fifteen.

## SPRING FRAMES

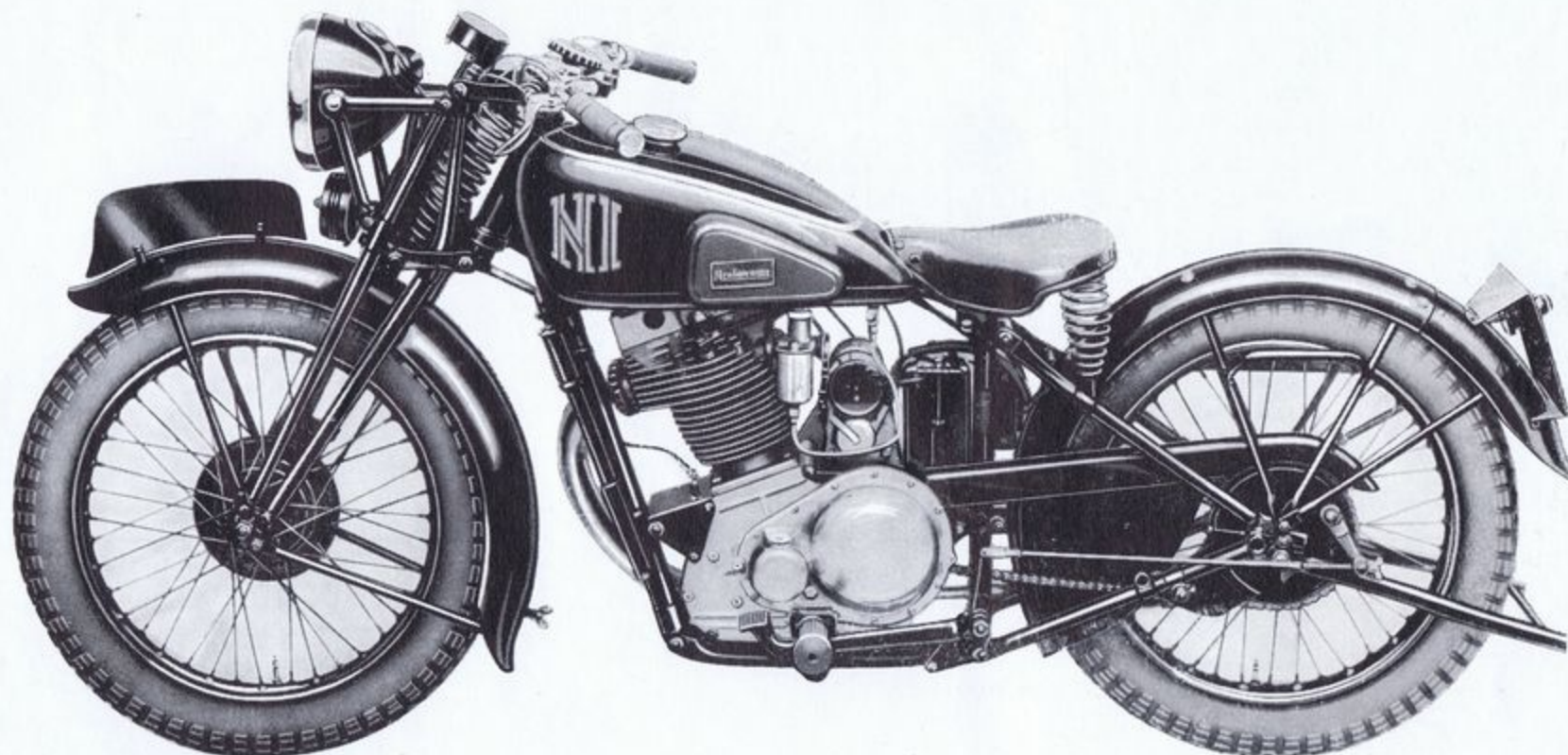






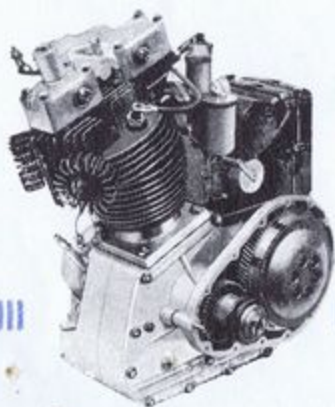
# NEW IMPERIAL

## MODEL 36



### SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 67 m.m., Stroke 70 m.m. Capacity 247 c.c. O.H.V. Single Port Head. Totally enclosed Valve Gear. In UNIT CONSTRUCTION with 4-Speed, foot-controlled Gearbox.
- Frame** - - - - Cradle type, 3-point suspension. Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - - Lucas 6-volt Magdyno Lighting Set. (Lucas Coil Set may be fitted at an allowance of £3). Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)



(COIL)  
**£47 10 0**

**PRICES COMPLETE**

(MAGDYNO)  
**£50 10 0**

*For full specification, see page fifteen.*

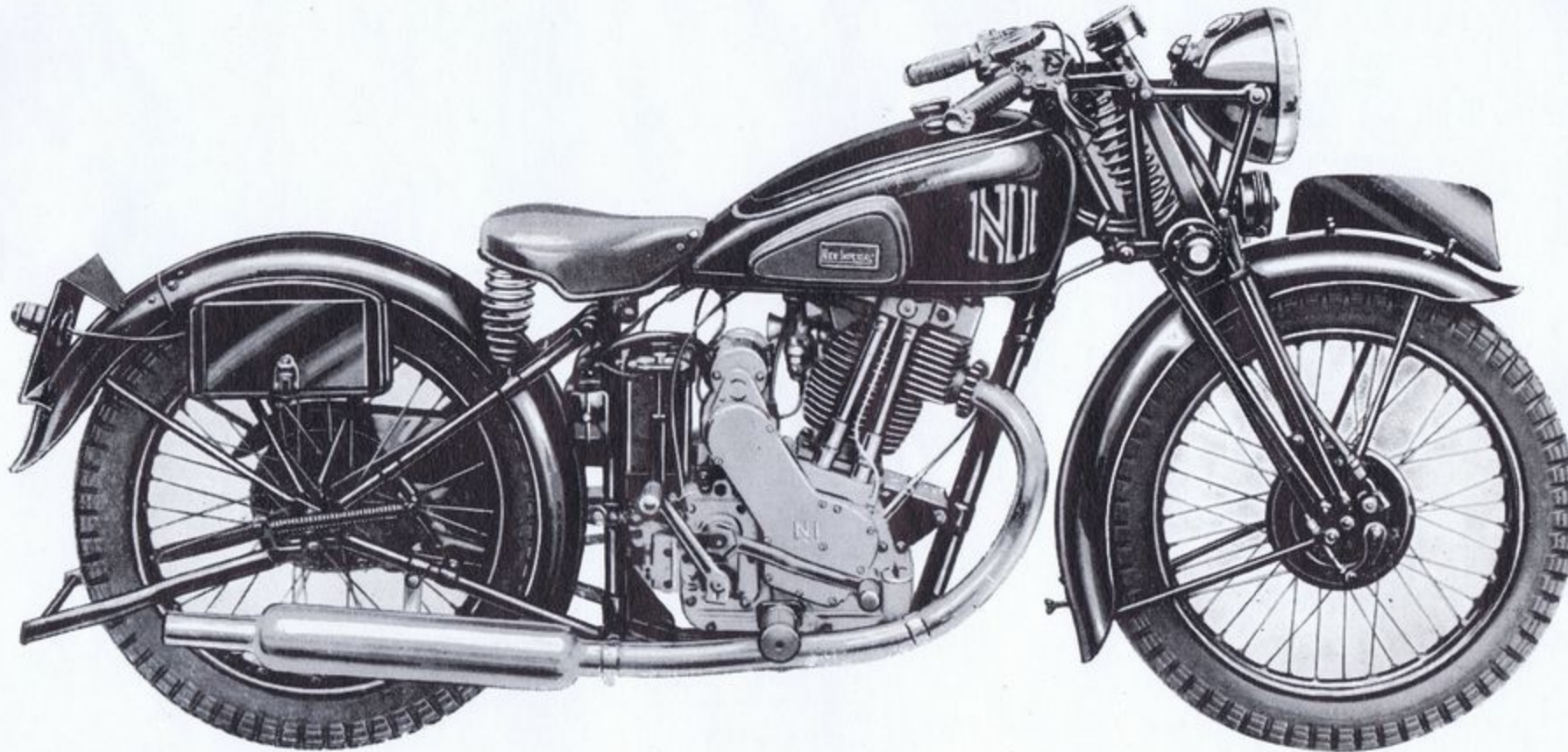
# UNIT CONSTRUCTION



# NEW IMPERIAL



MODELS 46 and 76



## SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 74 m.m. (Model 46), 82 m.m. (Model 76) ; Stroke 80 m.m. (Model 46), 94 m.m. (Model 76). Capacity : 344 c.c. (Model 46), 496 c.c. (Model 76). O.H.V., Single Port Head. Totally enclosed Valve Gear. In UNIT CONSTRUCTION with 4-Speed, foot-controlled Gearbox.
- Frame** - - - - Cradle type, 3-point Suspension. Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - Lucas 6-volt Magdyno Lighting Set. (Lucas Coil Set may be fitted at an allowance of £3). Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED (EXTRA according to type).

Model 46

£49 10	0	(COIL)
£52 10	0	(MAGDYNO)

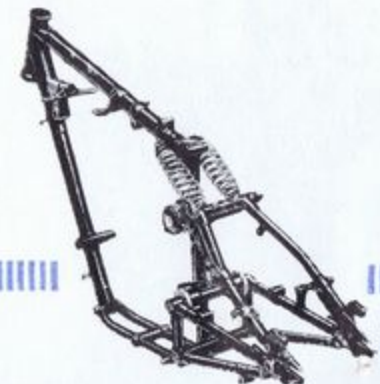
## PRICES COMPLETE

Model 76.

£57 10	0	(COIL)
£60 10	0	(MAGDYNO)

For full specification, see page fifteen.

# SPRING FRAMES

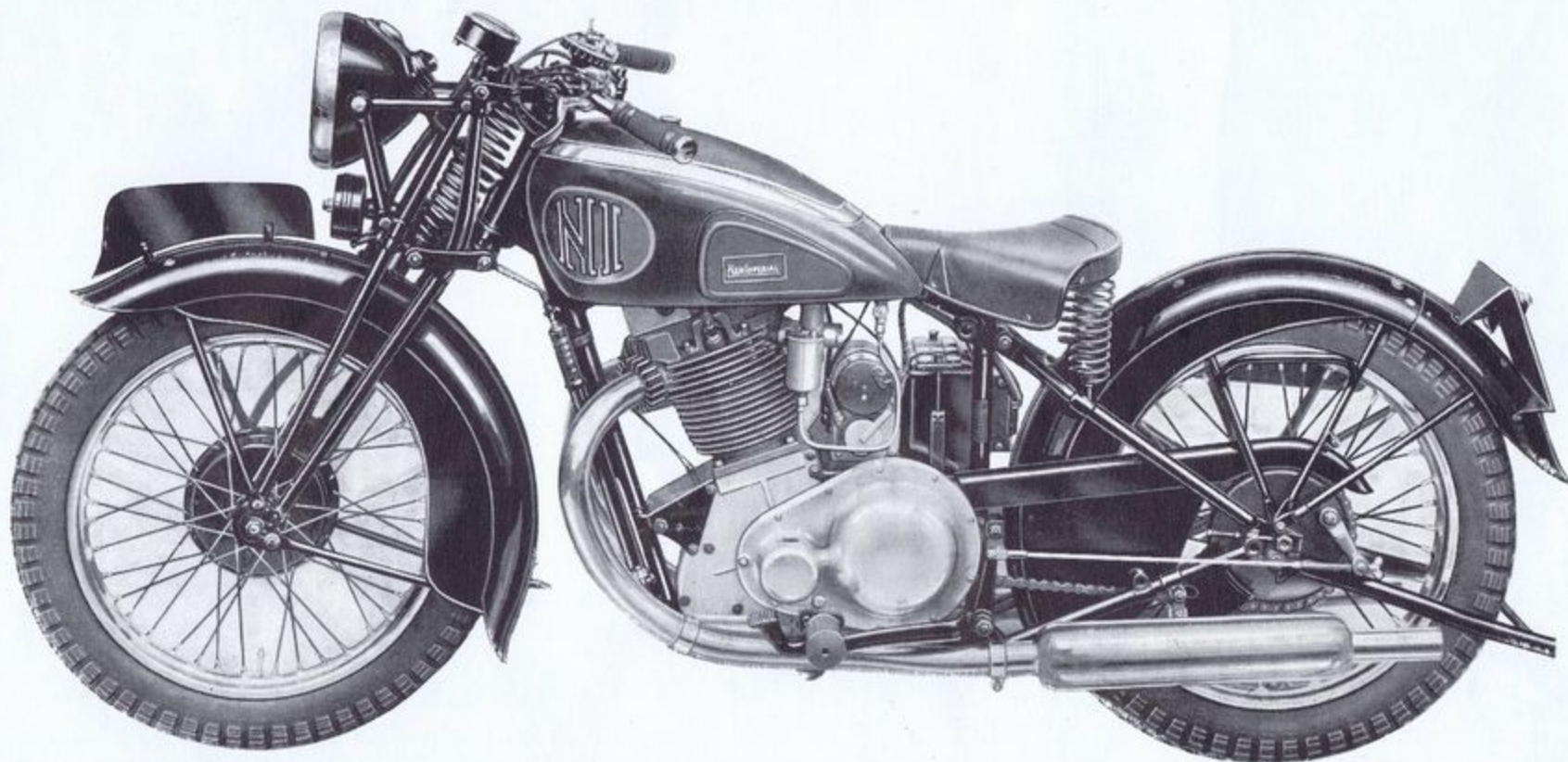






# NEW IMPERIAL

## MODEL 36DL



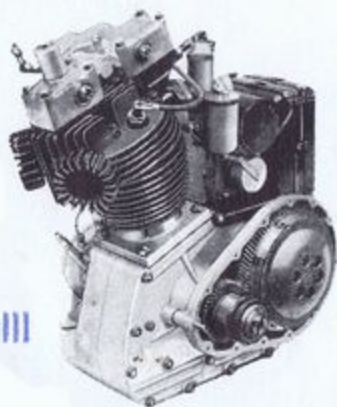
### SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 67 m.m., Stroke 70 m.m. Capacity 247 c.c. O.H.V. Double Port Heads. Totally enclosed Valve Gear. In UNIT CONSTRUCTION with 4-Speed, foot-controlled Gearbox. (Hand control optional.)
- Frame** - - - - Cradle type, 3-point suspension, Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - - Lucas 6-volt Magdyno Lighting Set. Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

PRICE COMPLETE

**£54 10 0**

*For full specification, see page fifteen.*



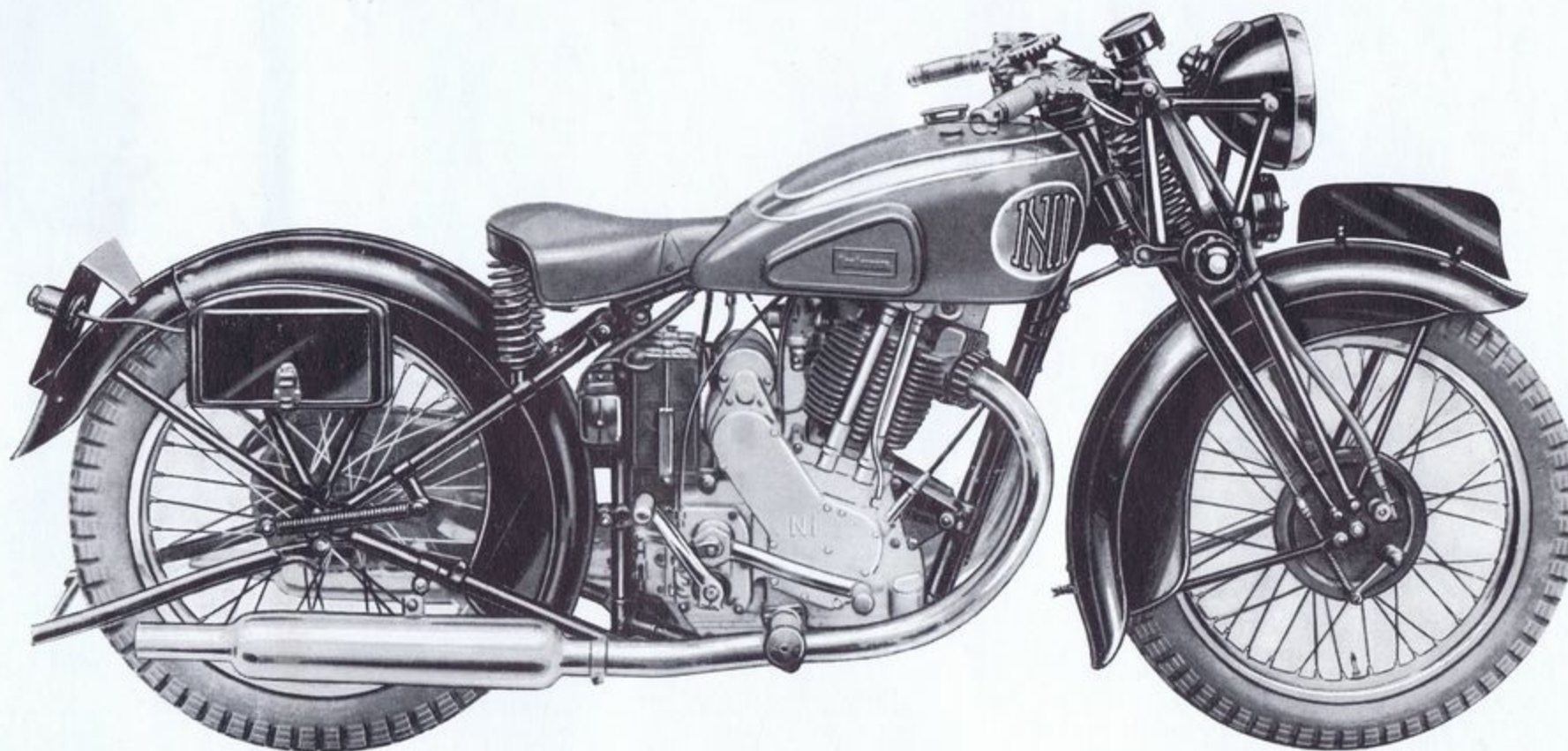
## UNIT CONSTRUCTION



# NEW IMPERIAL



MODELS 46DL and 76DL



## SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 74 m.m. (Model 46 DL), 82 m.m. (Model 76 DL) ; Stroke 80 m.m. (Model 46DL), 94 m.m. (Model 76DL). Capacity 344 c.c. (Model 46DL), 496 c.c. (Model 76DL). O.H.V. Double Port Heads. Totally enclosed Valve Gear. In UNIT CONSTRUCTION with 4-speed, foot-controlled Gear box. (Hand control optional.)
- Frame** - - - Cradle type, 3-point suspension. Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - Lucas 6-volt Magdyno Lighting Set. Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

Model 46DL.

£56 0 0

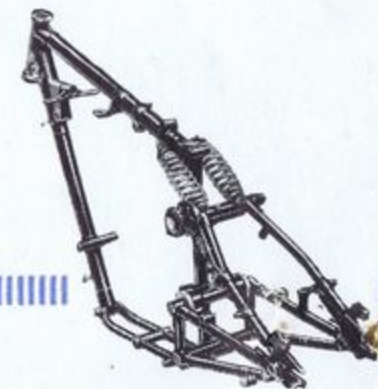
PRICES COMPLETE

Model 76DL.

£62 0 0

For full specification, see page fifteen.

## SPRING FRAMES







# NEW IMPERIAL

# NEW IMPERIAL



## SPECIAL FEATURES

### LUBRICATION.

● **Engine.** The system is operated by a single plunger pump, driven off the cam spindle, delivering oil to the Crankcase chamber via oilways drilled in the Crankcase, engine shaft and crankpin. This supply can be controlled in volume by a set screw which allows a proportion of the oil delivered by the pump to be returned direct to the sump in the Crankcase, so that eventual wear in the pump may be compensated by reducing the quantity by-passed and thus increasing the supply to the engine. (This system is not fitted to Models 23 and 36L.)

● **Gearbox.** Gear oil is used; replenishments are made through the filler and up to the level plug provided.

● **Primary Drive.** Engine oil is used; replenishments are made through the filler and up to the level plug provided. NOTE:—The three systems are entirely separate and in no way connected.

### CYLINDER HEADS.

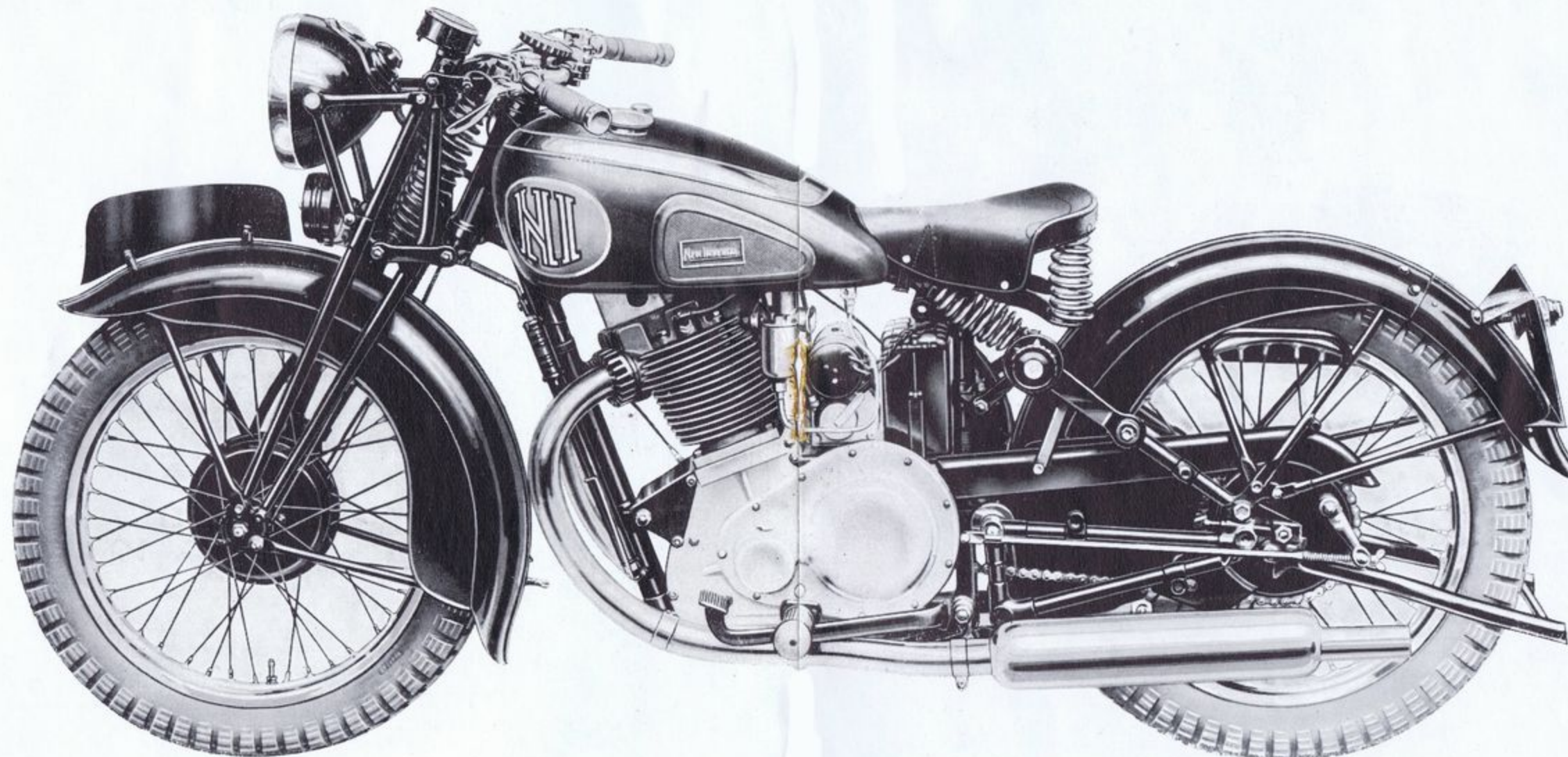
● On the Standard Models a single Port Head is used with a horizontal carburetter. On the De Luxe Models the Two Port Head is retained, and on the Clubman range a special Single Port Head with horizontal Carburetter is employed. Single Port Heads may be had on De Luxe Models without extra charge, but Two Port Heads are 30/- extra on Standard or Clubman Models.

### ROCKER GEAR.

● All Models are fitted with a cast aluminium Rocker Box which gives total enclosure to the Rocker Gear. This is lubricated in part by oil mist and in part by greasegun lubrication. The rocker spindles are drilled and fitted with grease nipples for this purpose.

### VALVE GUIDES.

● Valve guides are positively lubricated by a pressure lead taken off the engine lubrication system. Oil is led from the Crankcase by external pipe to the rocker box, which is drilled for oil-ways, and the flow is controlled by set pin and locknut. (Not Models 23 and 36L.)



## SPECIAL FEATURES

### GEARBOX.

With the exception of the Models 23 and 36L, all Models are fitted with a four speed foot control Gearbox of NEW IMPERIAL manufacture throughout. The foot control for 1938 is modified to give an improved and much reduced movement, a better pedal position relative to the footrest, and is more positive in action. Hand control can be had on any Model (no extra) but the Models 23 and 36L cannot be fitted with foot control.

### CONTROLS.

● Clip fitting controls are fitted to all Models except Model 23. Clutch lever and exhaust lever on the near side bar and Front brake, air and ignition controls, and twist grip throttle control on the offside bar. The new shape handlebar gives a very comfortable riding position.

### TANK.

● A three gallon tank of imposing dimensions is fitted and the new panels and finish give it an extremely smart appearance. The rear of the tank is now forked to take the nose of the saddle, thus allowing a much lower riding position.

### EQUIPMENT.

● Models 23 and 36L. Lucas 6 volt Coil Lighting Set, Compensated Voltage Control, H.F. Horn, Inflator, Licence Holder, Tool kit (Lucas M.L. Lighting Set £2 5s. 0d. extra).

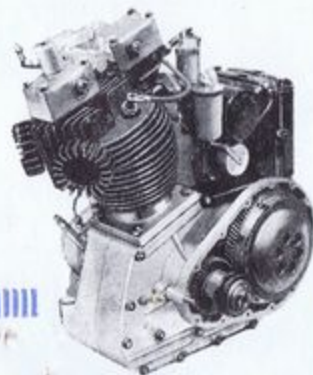
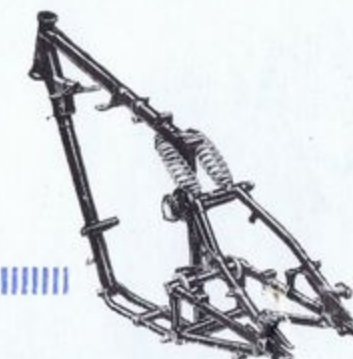
Other Models. Lucas 6 volt Magdyno Lighting Set with Compensated Voltage control. H.F. Horn, Licence Holder, Inflator, Tool kit (Lucas Coil Lighting Set (Standard Models only) £3 allowance).

ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED (£2 10s. extra).

Speedometer Prices (Extra).			
NON-TRIP	...	80 m.p.h.	£2 5 0
TRIP	...	80 m.p.h.	£2 10 0
NON-TRIP	up to	120 m.p.h.	£2 10 0
TRIP	up to	120 m.p.h.	£2 15 0

### SPRING FRAME MODELS.

Spring Frames may be fitted as an extra on all Models (except Models 23 and 36L) at £4 solo or £4 10s. 0d. for Sidecar Machines, the extra for Sidecar includes stronger springs for fork and frame and special fittings on the machine to receive Sidecar chassis connections.



# UNIT CONSTRUCTION

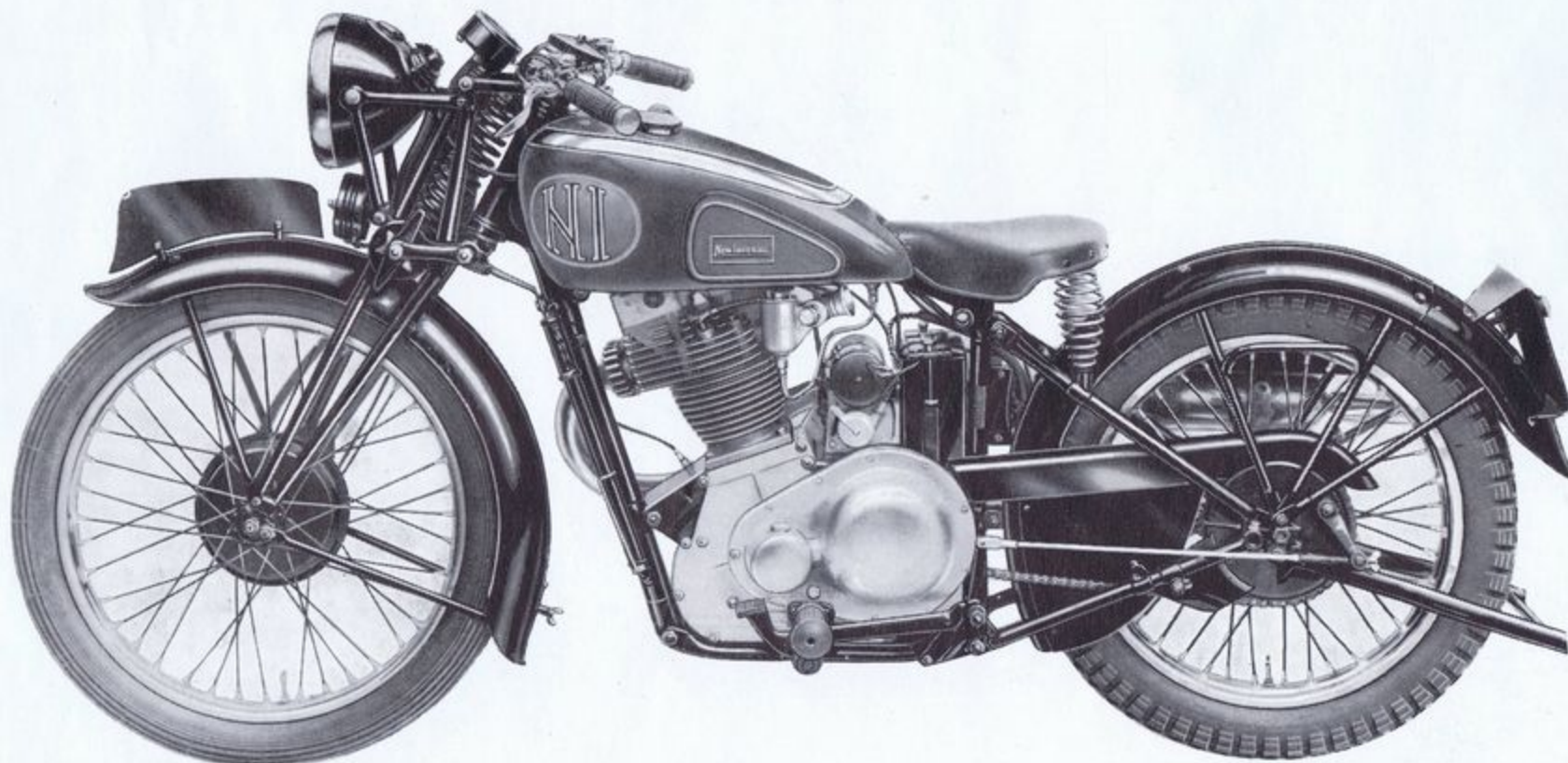
# SPRING FRAMES





# NEW IMPERIAL

## MODEL 90



### SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 67 m.m., Stroke 70 m.m. Capacity 247 c.c. O.H.V. Single Port Head. Totally enclosed Rocker Gear. In UNIT CONSTRUCTION with 4-Speed, foot-controlled Gearbox.
- Frame** - - - - Cradle type, 3-point suspension. Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - - Lucas 6-volt Magdyno Lighting Set (Magneto only, allowance £3). Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

### PRICE COMPLETE

**£57 0 0**

For full specification, see page fifteen.



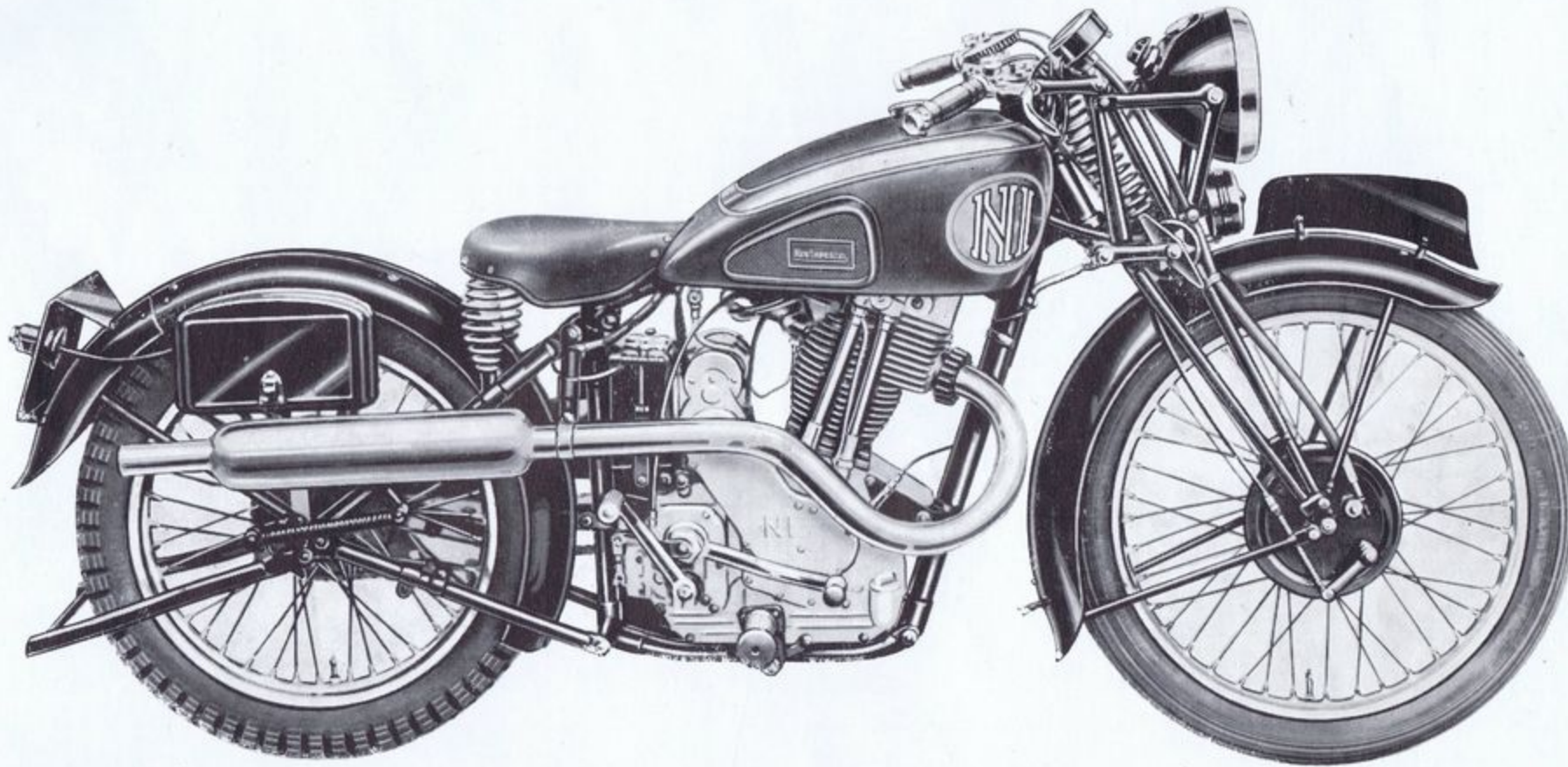
# UNIT CONSTRUCTION



# NEW IMPERIAL



MODELS 100 and 110



## SPECIFICATION :—

- Engine-Gearbox Unit** - Bore 70 m.m. (Model 100), 82 m.m. (Model 110). Stroke 90 m.m. (Model 100), 94 m.m. (Model 110). Capacity 346 c.c. (Model 100), 496 c.c. (Model 110). O.H.V. Single Port Head. Totally enclosed Rocker Gear. In UNIT CONSTRUCTION with 4-Speed, foot-controlled Gearbox.
- Frame** - - - - Cradle type, 3-point suspension. Front and Rear Stands. Spring Frame £4 extra.
- Equipment** - - - - Lucas 6-volt Magdyno Lighting Set (Magneto only, allowance £3). Compensated Voltage Control. H.F. Horn, Licence Holder, Pump, Tool Kit, etc. ILLUMINATED TRIP SPEEDOMETERS FITTED TO ALL MACHINES UNLESS OTHERWISE ORDERED. (EXTRA according to type.)

Model 100.

£59 10 0

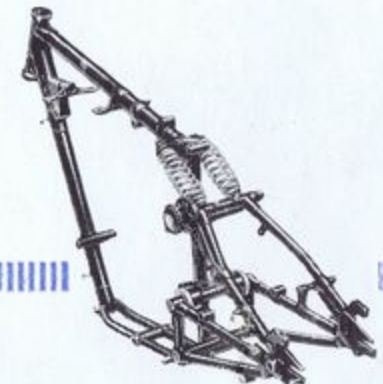
PRICES COMPLETE

Model 110.

£63 0 0

For full specification, see page fifteen.

## SPRING FRAMES







# NEW IMPERIAL

## SIDECARS

### Model "A" TOURIST £15 10 0

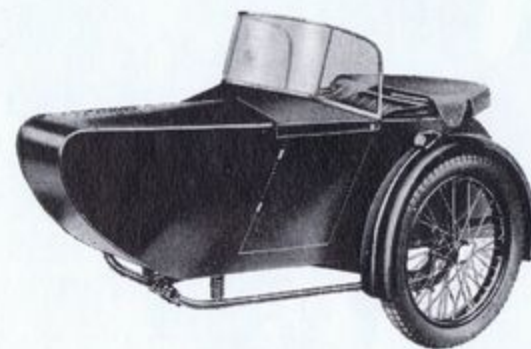
(For use with Model 46)

The Sidecar is specially selected, and the body, built of best selected 3-plywood, is mounted on a substantial hardwood frame and is covered in best quality rexine.

The Specification includes a large and comfortable, fully sprung seat and deep back rest, which is hinged to give access to the roomy rear locker.

An apron and celluloid sports screen, together with a storm-proof hood, provides ample weather protection, whilst the adjustable foot rest, large door, and inside pocket, are refinements that are usually only to be found on more expensively priced sidecars.

It is ideal for those requiring a well-finished reliable vehicle, and it can be used with confidence for long distance touring.



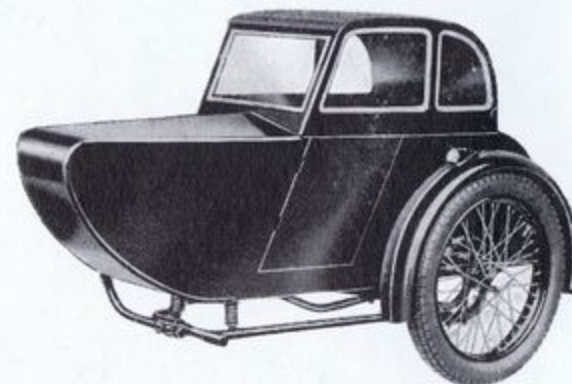
### Model "B" SPORTSMAN'S COUPE £17 10 0

(For use with Models 46, 46DL, 76, 76DL.)

The attractive sporting lines of this all weather or open Sportsman's Coupe are obvious at a glance. Body is of selected plywood, mounted on a robust hardwood frame, panelled in steel and finished in Cellulose. It may be had in Black, Light Green, Maroon or Grey.

A pressed steel head, which is hinged at the side, is fitted with four lights and large backswept front screen, all recessed and fitted with chromium content fillets. The hood cover may be folded back to give a variety of roof openings, and yet give complete weather protection. The seat and back cushions are deeply sprung and an adjustable footrest and inside pocket ensures comfort to the passenger. A spacious rear locker is fitted with lock and key, access to which is secured without disturbing the passenger.

(Fourth Arm Connection, standard.)



### Model "L" SPORTS LAUNCH £17 10 0

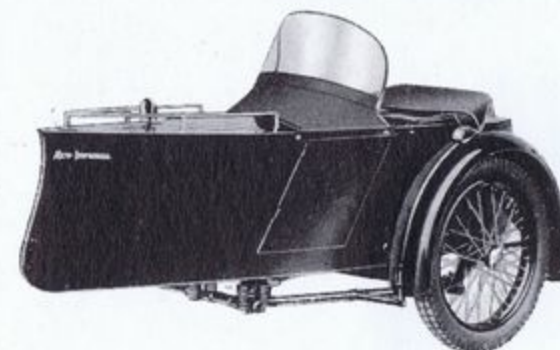
(For use with Models 46, 46DL, 76, 76DL.)

The new Sports Launch Body incorporates many improvements. It is deeper and wider than previous similar Models, and access to the rear locker is given by a hinged rear deck, which is fitted with a chromium-plated rail.

The front rails and the cowl are similarly finished and a large celluloid fold-forward windscreen and smart sports hood ensures complete weather protection.

The standard equipment also includes inside pocket, adjustable footrest, and the large seat and back cushions are fully sprung. Can be had in Black, Green, Maroon or Grey, the decks and top being finished Black, Green or Mahogany.

(Hood, 15/- Extra. Fourth Arm Connection, standard.)



## UNIT CONSTRUCTION



## WHAT UNIT-CONSTRUCTION MEANS TO YOU

The basic principle of Unit-Construction is the casting of the Engine Crankcase and the Gear Box body in one piece, and with it is associated the practice of using helical gear wheels to take the primary drive (i.e., engine to gear box), instead of the conventional chain-cum-sprockets.

THE REAL AND DEFINITE ADVANTAGES OF UNIT-CONSTRUCTION ARE :—

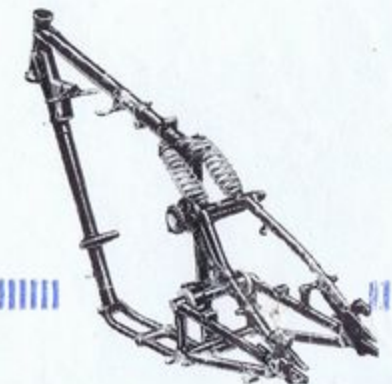
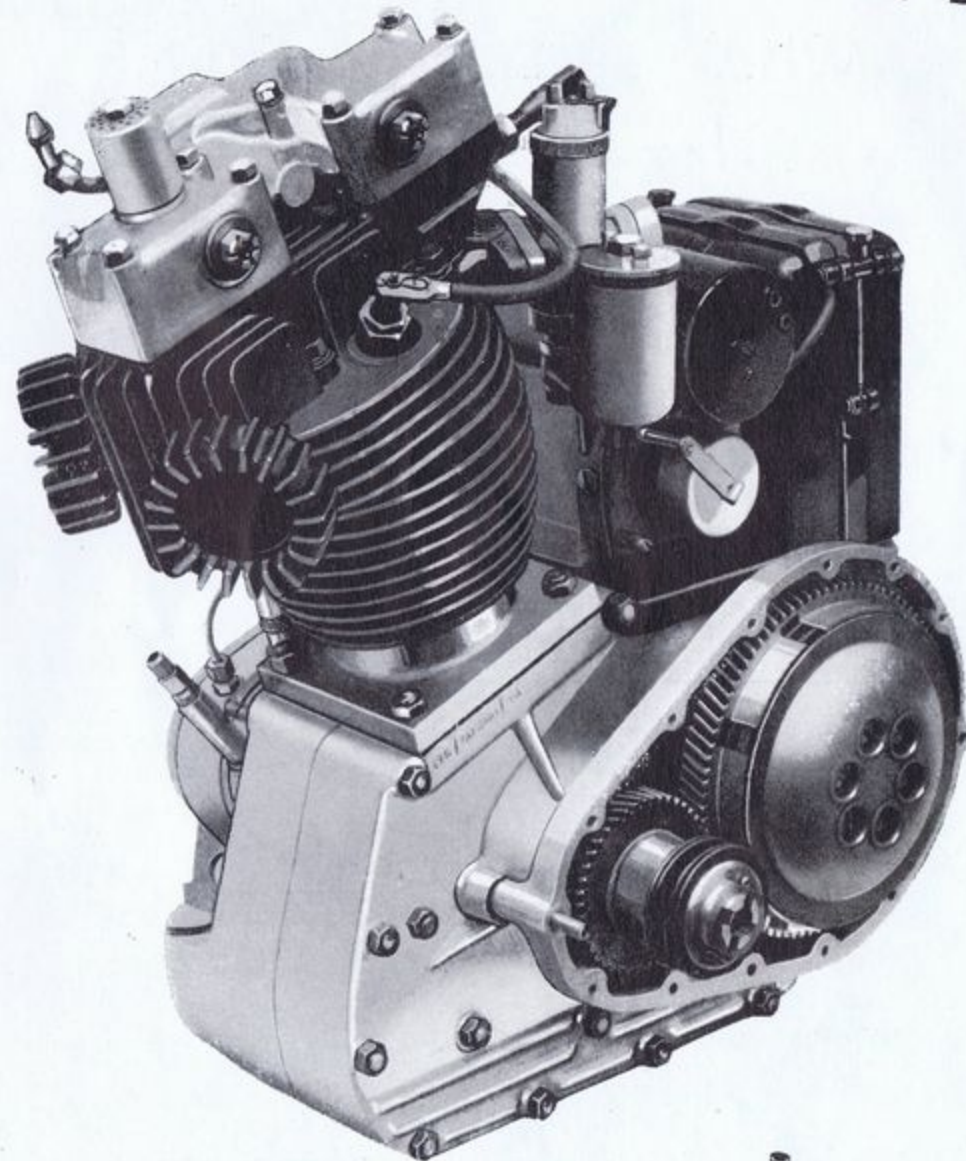
- In the case of a separate engine and gear box rigidity between the two units is essential if a smooth drive is to be obtained and if the chain is to run in line, at the proper tension. To produce these conditions the use of heavy brackets, etc., is essential and is complicated by the fact that provision for taking up chain stretch or wear has to be made, and at the same time an oil bath case or cover has to be fitted, allowing for the movement referred to above between the two units.

In the case of UNIT-CONSTRUCTION, however, these difficulties do not arise because :—

- (a) The two units are built in one strong casting.
- (b) There is no primary chain to stretch or sprocket to wear—only two long-life, robust helical gear wheels.
- (c) There is no stretch or wear to take up, and, therefore, no provision for relative movement (between engine and gear box) is necessary.
- In the case of separate units chain wear must and does occur, and to take up this "slack" it is sometimes necessary to remove the chain cover to "feel" for corrected slack, to slack off gear box retaining bolts, operate gear box adjusting screw, tighten up gear box retaining bolts, adjust rear wheel position to take up slack in the rear chain created by moving the gear box.

UNIT-CONSTRUCTION renders these adjustments absolutely unnecessary. Save your money on chain replacements — your TIME matters too !

- The helical gear wheels run in an oil bath gear case, the oil supply, quite un-connected with the engine oil circuit, is maintained through a large filler hole. A level plug is provided.
- The great rigidity of UNIT-CONSTRUCTION and the use of helical gear wheels in place of chain and sprockets allows the power of the engine to be transmitted to the gear box with A MINIMUM OF FRICTIONAL OR WHIP LOSSES — more M.P.G., and M.P.H. for you to use.







# NEW IMPERIAL

## WHAT A SPRING FRAME MEANS TO YOU

The general construction of a Spring Frame follows very closely, in its outline, its rigid, conventional counterpart, but the chain stay portion of the rear triangle of the spring frame is mounted at its forward end on a pivot so positioned as to allow the rear fork end to move with the rear wheel in a vertical plane, the shock of the movement being taken up by spring-loading the seat stay, and controlling the movement by a damper.

The essentials of good Spring Frame design are :—

- (a) The Sprung part of the frame must be strong and scientifically triangulated and yet be as light as possible.
- (b) The pivots must be on wide centres to give a good working base.
- (c) The pivots must be mounted on large taper roller bearings, the wear on which must be taken up easily.
- (d) Lubrication must be made easy by the provision of suitable grease gun nipples.

NOTE.—Upswept Exhaust Pipes cannot be fitted with Spring Frame.

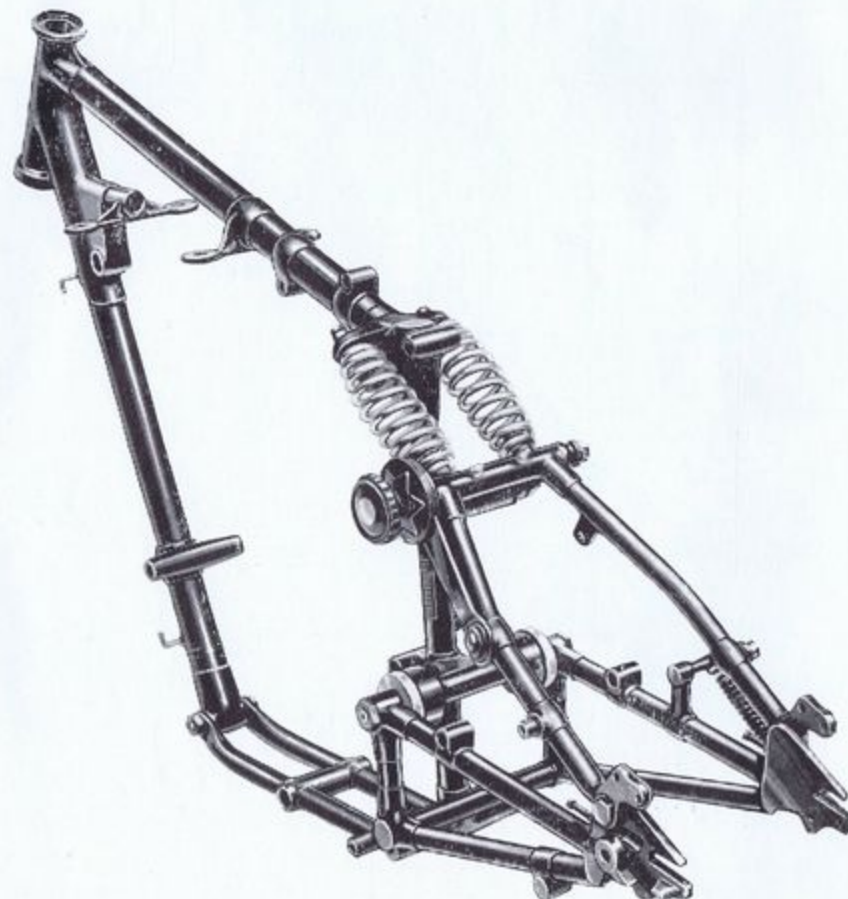
### WHAT IT DOES —

- (a) Removes riding fatigue.
- (b) Gives you a new perception of riding comfort.
- (c) Gives longer life to every part of the machine particularly batteries and tyres.
- (d) Converts third-class by-roads into A class highways.
- (e) Gives you that "on rails" feeling on corners and makes for SAFETY FIRST.

### WHAT IT DOES NOT DO —

- (a) Create "wavy" steering.
- (b) Cause skids.
- (c) Roll on corners.
- (d) Put the wheels out of track by the rear wheel "pulling round"—the taper roller bearings see to that.

(Sprung Carrier, with pillion seat, 35/- extra).



UNIT CONSTRUCTION

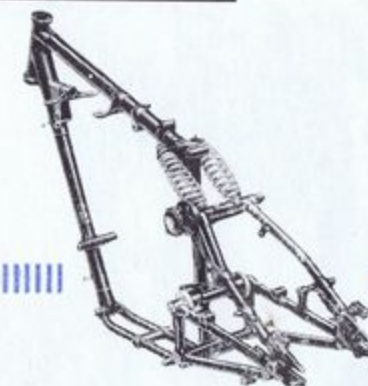


## SPECIFICATIONS

	Model 23.	Model 36L.	Model 36.	Models 46 and 76.	Model 36DL.	Models 46DL and 76DL.	Model 90.	Models 100 and 110.
Description ...	" UNIT MINOR."	" LIGHT 250."	" STANDARD UNIT."	" STANDARD UNIT."	" DE LUXE UNIT."	" DE LUXE UNIT."	" CLUBMAN UNIT."	" CLUBMAN UNIT."
Cylinder Bore	55 m.m.	67 m.m.	67 m.m.	74 m.m. on Mod. 46 82 m.m. on Mod. 76	67 m.m.	74 m.m. on Mod. 46DL 82 m.m. on Mod. 76DL	67 m.m.	70 m.m. on Mod. 100 82 m.m. on Mod. 110
Piston Stroke...	62.5 m.m.	70 m.m.	70 m.m.	80 m.m. on Mod. 46 94 m.m. on Mod. 76	70 m.m.	80 m.m. on Mod. 46DL 94 m.m. on Mod. 76DL	70 m.m.	90 m.m. on Mod. 100 94 m.m. on Mod. 110
Capacity ...	146 c.c.	247 c.c.	247 c.c.	344 c.c. on Mod. 46 496 c.c. on Mod. 76	247 c.c.	344 c.c. on Mod. 46DL 496 c.c. on Mod. 76DL	247 c.c.	346 c.c. on Mod. 100 496 c.c. on Mod. 110
Type ...	All Models have O.H.V. Engine and Gearbox in UNIT CONSTRUCTION.							
Carburetter ...	AMAL, Air Cleaner	All Models fitted with AMAL Carburetter.						
Control ...	Hand	Hand	Foot	Foot	Foot	Foot	Foot	Foot
Frame ...	All Models fitted with Cradle Frame, with 3-point Suspension.							
Forks ...	Pressed	Taper Tubular Forks, fitted with Steering and Movement Dampers, on all Models except Models 23 and 36L.						
Primary Drive	Helical Gears	Helical Gears	Helical Gears	Helical Gears Double Helical Gears on Mod. 76	Helical Gears	Helical Gears Double Helical Gears on Mod. 76DL	Helical Gears	Double Helical Gears
Brakes ...	4" Front 6" Rear	5" Front 6½" Rear	5" Front 7" Rear	5" F.; 7" R. (Mod. 46) 7" F.; 7" R. (Mod. 76)	7" Front 7" Rear	7" Front 7" Rear	7" Front 7" Rear	7" Front 7" Rear
Tyres ...	25 x 3 Dunlop	25 x 3 Dunlop	26 x 3.25 Dunlop	26 x 3.25 Dunlop	26 x 3.25 Dunlop	26 x 3.25 Dunlop	27 x 3 Ribbed, F. 26 x 3.25 Stud'd, R.	27 x 3 Ribbed, F. 26 x 3.25 Studded, R.
Tank Finish ...	Black and Gold	Black and Gold	Black and Gold	Black and Gold	Chrome, Blue and Gold	Chrome, Blue and Gold	Chrome, Carnation and Gold	Chrome, Carnation and Gold
Saddles ...	" DUNLOP " or " LYCETT " at choice.							
Lighting ...	Coil (M.L. extra)	Coil (M.L. extra)	Magdyno (Coil by allowance)	Magdyno (Coil by allowance)	Magdyno	Magdyno	Magdyno (Mag-neto by allowance)	Magdyno (Mag-neto by allowance)

The above specifications may be altered, substituted, or withdrawn from time to time, of which no notice can be given, and all orders are accepted and executed upon this understanding.

## SPRING FRAMES







# NEW IMPERIAL

## SPARES SERVICE—

The ideal Spares and Repairs service is, of course—

(1) The purchase of "NEW IMPERIAL" components from our local dealers at once—"over the counter."

(2) The giving of advice, and the diagnosis of troubles and effecting rectification on the spot.

In cases where such service is not available, the "NEW IMPERIAL" Spares and Repairs Department is at your disposal.

Wherever possible we give a "per return" Service, which you will appreciate is invaluable to a Motor Cyclist.

Our aim is to serve you—quickly—courteously.

## WHAT OTHER PEOPLE SAY of UNIT CONSTRUCTION & SPRING FRAMES

"A year's riding here and abroad on my "NEW IMPERIAL" has proved there are no snags whatever in the spring frame, and the comfort (my age is 60) has to be experienced to be believed. With the 'NEW IMPERIAL' arrangements one just sits and stays put without difficulty and without discomfort . . . for the small extra outlay one gets four-wheel comfort."

"This letter proves to be the most pleasant I have ever written you."

"The thing I am most pleased about is the fact that the eggs I carried throughout the Land's End Trial were unbroken at the finish."

"The comfort to rider and pillion passenger is proved beyond all doubt . . . surely 'NEW IMPERIAL' UNIT CONSTRUCTION plus SPRING FRAME must be the most smooth and comfortable thing on two wheels obtainable."

"I feel I must write and tell you what a really splendid machine the 'NEW IMPERIAL' Spring Frame Model 36 (250 c.c.) is—it is indeed a revelation in motor cycle design."

"Until a month ago, I was an idle scoffer of anything out of the ordinary in design, but I might tell you I had a great awakening when trying the above model."

"The spring frame is luxurious—that is the only fitting word I can give to the comfort of the machine, even on the roughest roads."

"The engine is remarkably silent and the performances distinctly up to standard compared with other machines I have owned at considerably more cost. I congratulate you on a splendid machine."

## What "The MOTOR CYCLE" says of the 1938 "Standard UNIT" 350 c.c. Spring Frame Model

"A machine with two such advanced features as Unit Construction and a Spring Frame immediately stands out from the run of conventional motor cycles. This machine is produced by a firm which has a fine racing record, and, as might be expected, their racing experience is reflected in the production models. In all racing machines steering and road-holding are of major importance, and the Model 46 'NEW IMPERIAL' excels in these respects."

## What "MOTOR CYCLING" says of the 1938 "Clubman Unit" 250 c.c. Model

"Taken all round, the Model 90 250 c.c. 'CLUBMAN UNIT' New Imperial offers exceptional value at £61 complete with spring frame, Unit Construction, and a useful performance. The economy factor cannot be praised too highly. The finish and condition in which the machine is turned out are excellent. These points must all appeal to the rider who requires a good performance with a minimum of attention, not forgetting the excellent comfort provided by the spring frame."



# UNIT CONSTRUCTION

BARNISTONMOTORS.CO.UK



# NEW IMPERIAL



## A FEW OF THE OUTSTANDING "NEW IMPERIAL" ACHIEVEMENTS during the past two years

LIGHTWEIGHT T.T. 1936  
won at record speed of 74.28 m.p.h.

on a New Imperial UNIT CONSTRUCTION, 250 c.c. Model  
ridden by A. R. Foster.

ULSTER GRAND PRIX (250 c.c.) 1936  
"New Imperial" FIRST (S. Wood) at 78.76 m.p.h.  
"New Imperial" SECOND (A. R. Foster) at 78.76 m.p.h.  
(only 8/10th of a second difference in time between the two  
riders at the finish).  
FASTEST LAP—A. R. Foster at 80.83 m.p.h.

### DONINGTON PARK RACES (250 c.c.)

Easter Meeting—A. R. Foster FIRST on 250 c.c. UNIT  
CONSTRUCTION Model at speed of 61.32 m.p.h.  
Whitsuntide Meeting—A. R. Foster FIRST again on 250 c.c.  
UNIT CONSTRUCTION Model at record speed of 61.85 m.p.h.  
August Meeting—L. J. Archer SECOND at speed of 61.34 m.p.h.  
A. R. Foster THIRD at speed of 61.21 m.p.h.

### BROOKLANDS G.P. RACES (250 c.c.)

Oct. 1937  
"New Imperial" FIRST (J. M. West) at speed of 62.02 m.p.h.

#### OTHER NOTABLE SUCCESSES include :—

AUSTRALIAN T.T., 1937—Lightweight, SECOND.  
IRELAND "200" (250 c.c.)—SECOND.  
GENEVA G.P. (250 c.c.)—THIRD.  
SCOTTISH 6 DAYS' TRIAL—Coronation Cup.  
Albert Memorial Trophy.  
WEST of ENGLAND TRIAL—250 c.c.-350 c.c. Cup.



*Reproduced with acknowledgment to "The MOTOR CYCLE."*

The finish of the ULSTER GRAND PRIX (250 c.c.) 1936—probably one of the most remarkable "close finishes" ever recorded in the annals of motor cycling—S. Wood on a 250 c.c. "NEW IMPERIAL" beating A. R. Foster, also on a 250 c.c. "NEW IMPERIAL."





# COPY OF GUARANTEE

GIVEN BY NEW IMPERIAL MOTORS LTD. TO THEIR DEALERS.

We do not appoint agents for the sale on our behalf of our motor cycles or other goods, but we assign to motor cycle Dealers areas in which we supply to such Dealers exclusively for re-sale in such areas. No such Dealer is authorised to transact any business, give any warranty, make any representation or incur any liability on our behalf.

## CONDITIONS OF SALE AND GUARANTEE.

We give the following guarantee with our motor cycles, motor cycle combinations and sidecars other than tyres, saddles, chains and lighting and electrical equipment, and other than accessories and component parts not made by us. This guarantee is given in place of any implied conditions or warranties or any liabilities whatsoever statutory or otherwise; no guarantee except that hereinafter contained and no condition or warranty whatsoever statutory or otherwise is given or is to be implied, nor are we to be under any liability whatsoever except under the guarantee hereinafter contained. Any statement, description, condition or representation contained in any catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying, or overriding anything herein contained. In the case of machines (a) which have been used for "hiring out" purposes; or (b) any motor cycle and/or sidecar used for any dirt track, cinder track or grass track racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition); or (c) machines from which the trade mark, name or manufacturing number has been altered or removed; or (d) any machines in which parts have been used not supplied by or approved by the motor cycle manufacturer; or (e) any machine from which the silencing system as fitted by the manufacturer has been partially or wholly removed or interfered with, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied nor are we to be under any liability whatsoever in respect of any such machine.

We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for six months only from the date of purchase, or date of exchange in case of any accessory or part supplied by way of exchange as hereinafter provided, and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part or accessory in exchange for the part of the motor cycle, motor cycle combination or sidecar or accessory made by us which may have proved defective. We undertake, subject to the conditions mentioned below, to make good in manner aforesaid any part or accessory made by us and covered by this guarantee which has proved defective within the said period of six months. We do not undertake to replace or refix, or bear the cost of replacing or refixing any such new part or accessory made by us in the motor cycle, motor cycle combination or sidecar. As motor cycles, motor cycle combinations and sidecars are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others the following acts:—

1. The attaching of a sidecar to a motor cycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.
2. The use of a motor cycle or of a motor cycle and sidecar combined, when carrying more persons or a greater weight than that for which the machine was designed by the manufacturers.
3. The attaching of a sidecar to a motor cycle by any form of attachment, not provided, supplied or approved, by the manufacturers, or to a motor cycle which is not designed for such use.

We do not guarantee tyres, saddles, chains or lighting or electrical equipment, or any accessories or component parts not made by us supplied with our motor cycles, motor cycle combinations or sidecars. As regards all such tyres, saddles, chains and lighting and electrical equipment, accessories and component parts, not made by us, no guarantee, condition or warranty of any kind statutory or otherwise is given or is to be implied, and we are to be under no liability whatsoever in respect thereof.

## CONDITIONS OF GUARANTEE.

If a defective part or accessory made by us should be found in our motor cycles, motor cycle combinations or sidecars or in any part or accessory made by us and supplied by way of exchange as before provided, it must be sent to us CARRIAGE PAID, and be accompanied by an intimation from the owner that he desires to have it repaired or exchanged free of charge under our guarantee, and he must furnish us at the same time with the number of the machine, the date of purchase or the date when the alleged defective part or accessory was exchanged as the case may be. Failing compliance with the above, such articles will lie here at THE RISK OF THE OWNER, and this guarantee and any implied guarantee warranty or condition shall not be enforceable.

## REPAIRS.

Any motor cycle, motor cycle combination or sidecar sent to us to be plated, enamelled or repaired will be repaired upon the following conditions, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, such guarantee to extend and be in force for three months only from the time such work shall have been executed, and this guarantee is in lieu and in exclusion of all conditions and warranties statutory or otherwise and all liabilities whatsoever and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

## CONDITIONS OF SALE, ETC.

1. The Prices in this catalogue are strictly nett, and all goods are sold subject only to the guarantee given in this catalogue.
2. The Prices of all goods in this catalogue are subject to alteration, of which no notice can be given, and all orders are accepted and executed upon this understanding.
3. The Specifications shown in this catalogue may be altered, substituted, or withdrawn from time to time, of which no notice can be given and all orders are accepted and executed upon this understanding.
4. Machines are despatched carriage paid, to the nearest Railway Station, Britain only.
5. Notwithstanding payment of carriage, all goods are to be considered as delivered to the customer when delivered on rail or lorry from our Works, and all orders are accepted and executed upon this understanding.
6. For Northern Ireland, in addition to cash prices shown herein, the following is added to invoice towards cost of carriage:—Solo Machines, 8/- per machine, Combination Models, 13/6 per machine.
7. We reserve the right to despatch by either goods or passenger train, but when machines are sent by goods train in crates, the crates are charged for, and half the amount charged is allowed, if crates are returned in good condition.
8. Cases or crates for shipping are charged at cost price, and are not returnable.
9. Upon receipt of goods by customer, the Railway Company's or Carrier's sheet should, in all cases, be signed for "UNEXAMINED." Goods can then be carefully inspected, and in the event of any damage or shortage, notice should be sent to the Railway Company, or Carrier, and claim made upon them for the value of the damage or shortage.

**INSURANCE:**—All Motor Cycles are insured to town of delivery in Britain. To cover the cost of this 1/- per Machine will be added to Invoices.

**TERMS OF BUSINESS:** Cash against Invoices.

**SPARES AND SERVICE:**—An After Sales Service, ensuring efficient administration and quickness of despatch, is at the disposal of all "NEW IMPERIAL" Riders. Parts can be sent by post cash against delivery anywhere in the United Kingdom.

**N.B.**—The construction of "NEW IMPERIAL" Motor Cycles is covered by the following and other patents and registrations:—196760, 141162, 688819, 211741, 703877, 16563, 685970, 195334, 192895, 378174, 771232, 388434, 388433, 390304, 391279.  
Patents also held in Germany, Belgium, France, Italy, etc.