The UNAPPROACHABLE

Being —

A CATALOGUE OF THE

UNAPPROACHABLE

Norton

(REGD TRADE MARK.)

MOTOR CYCLES OF
NINETEEN TWENTY EIGHT

and

INCORPORATING A
SELECTION OF THE

SUCCESSES ATTAINED

by the

NORTON DURING
NINETEEN TWENTY SEVEN

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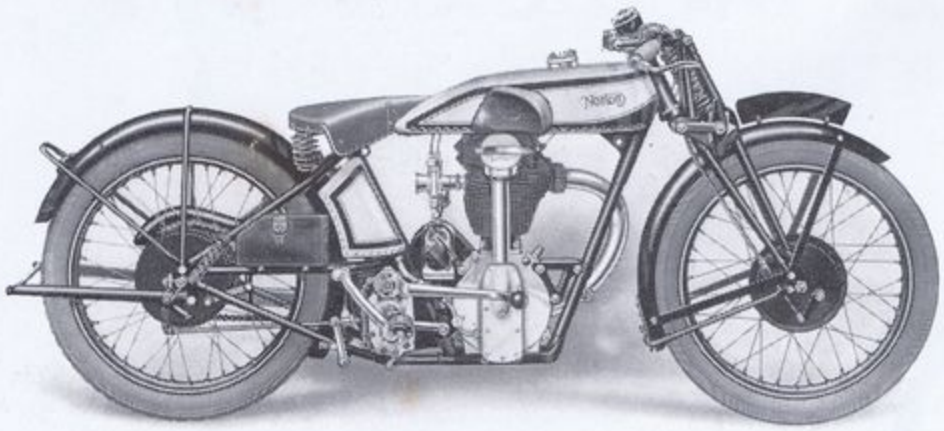
The Unapproachable Norton

By way of INTRODUCTION

ALMOST every purchaser of a Motor Cycle is a keen student of specifications. No one buys so important an item as this without first learning all that can be learned about it. He will weigh the pros and cons of this and that special feature, consider the advantages of a single cylinder as opposed to a twin—or *vice versa*, as his fancy suggests—and he will probably walk into his Agent's depot with a very clear idea of what he is about to buy. Well, it is in order that every purchaser of a Norton Motor Cycle shall be in a position to " know " his machine even before it becomes his, that very detailed specifications are included in these pages. But specifications are not everything. By a very long way. Take two different makes of machines of similar specification. One will put up a fine performance, the other will be a continual source of annoyance and disappointment to its owner. So that, however good a specification may look in print the experienced motor cyclist will want to know more about the machine he is going to buy than can be learned from a study of its specification.

And that is the reason why this Norton Catalogue of 1928 Models has incorporated with it a record of the outstanding successes attained by Norton Motor Cycles during the past season. Here, the purchaser of a new machine will find all that he wishes to know concerning specifications and constructional details and, under the same cover, he has proof—page upon page of the most convincing proof it is possible to provide—that the performance of the Norton is as good as its specification suggests, that it is, in a word—Unapproachable.



1928

Norton WINNER OF 1927 1926 1924 SENIOR T.T.

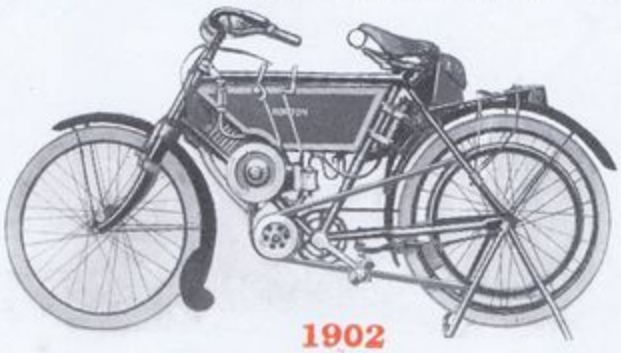
A brief survey of NORTON HISTORY

THE history of motor cycling and the history of Norton each had their genesis at about the same time. As early as 1898 the late Mr. James L. Norton had established a small factory in Birmingham whereat was produced the " Norton Energette "—a machine that to-day no self-respecting " blood " would be seen even inspecting—but which was in its time a pioneer of the motor cycle era. At that time the firm was also producing machines to be sold under other names and transfers, but soon the demand for Nortons—as Nortons—became so insistent that this was discontinued.

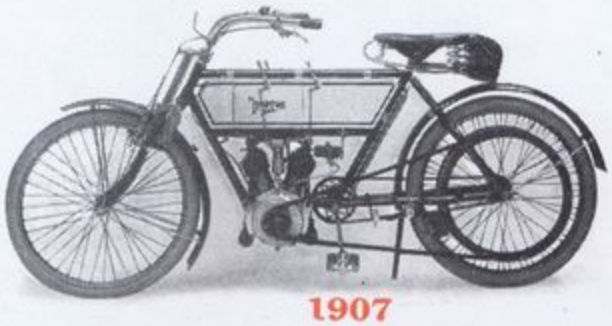
Many will recall the controversies that were caused by Norton innovations of the early nineteen hundreds—innovations that to-day are adopted by the industry as a whole. The long stroke engine, now almost universally copied, the low frame and rational riding position of which Norton were the pioneers, are examples.

Meanwhile, up and down the country novices were winning races and setting up records with Norton machines, and gradually this now world-famous make came into its rightful place—as the leading motor cycle of its time—a position that was definitely established when in 1907 a Norton won the first T.T. race (twin cylinder class), by a margin of 33 *minutes*.

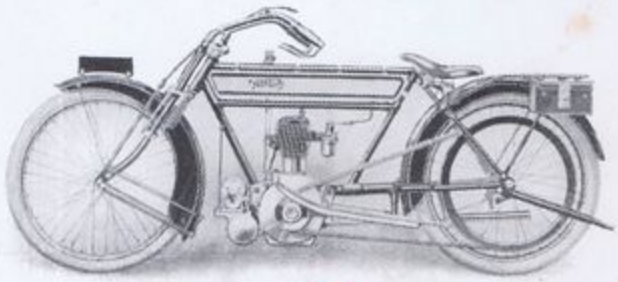
Recent Norton history is too well known to need reference here. That Nortons have won three Senior T.T.'s in the past four years, the famous Maudes Trophy four successive years and literally swept the boards in all the worth-while International events, every motor cyclist knows—and as for 1927, well, the story is told herein.



1902



1907



1911

A short discourse under the title FOREWORD

HERE, then, are the 1928 Norton Models—a fine range from which every rider can make a safe and satisfactory choice. Many of the machines offered for this season are the same successful models that proved their exceptional merit in the hands of all kinds of riders during 1927—with, in most cases, detail improvements.

There are, however, two new models—the Camshaft type and the push rod model each in the new " cradle " frame. The term " new model " is used in the limited sense only since, although they have only been recently offered to the public for the first time, both types have seen very strenuous service in all the big speed events of 1927. They are, therefore, thoroughly tried, tested and proved models—machines that have shown themselves right up to the " unapproachable " standard—and have thereby earned the right to be classed with other famous models of the Unapproachable Norton.

It was on Camshaft models that Bennett won the T.T., and Woods won most of his successes—brief details of which are recorded in later pages. And it was with the new push rod Nortons that Jimmy Shaw came fourth in the Senior T.T., and a private owner occupied the same position in the Amateur T.T. What better proof than this can exist ? What better test of the quality of these machines can be found ?

Well, then, the purchaser of a Norton buys with his eyes open. He buys a machine whose performance is a foregone conclusion, the reliability of which has been proved in every kind of trial, under every condition of road or track.

The Senior Tourist Trophy won three times in the past four years by Norton.

In continuation of this FOREWORD

BUT in choosing a Norton, the motor cyclist buys more than a proved machine. Everyone knows that Great Britain leads the world in motor cycle construction. France, America, Germany, Italy—they all take their cue from our staunch little Island. The British machine is supreme!

But there are "degrees" in British quality, as well as a great many interpretations of the words "British Built." It is perfectly simple for a manufacturer to buy his magnetos, tyres, frames, engines and components of all kinds from any country in the world—and his nuts and bolts from Timbuctoo, if he wishes — and build them together in his own factory—or his own back yard for that matter—and there we have a "British Built" machine—with none of that character or quality that is essentially British.

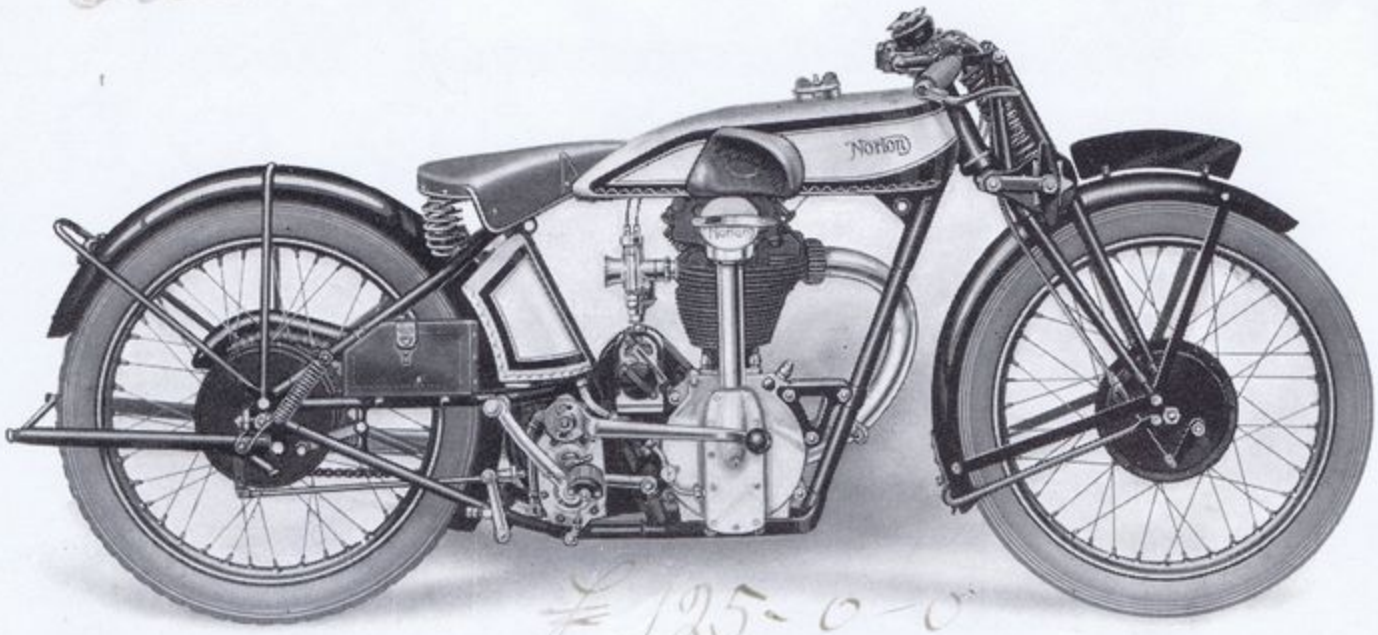
The Norton is "British Built," but that term is not strong enough. It is of British design, and is British *made* to the very last nut. From the raw material to the final stage of manufacture every process is performed here in our own country, by our own fellow countrymen, and its quality is therefore typically British. Small wonder, then, that the Norton is so unapproachable! Small wonder that in International, Colonial and National competition Nortons uphold British traditions so thoroughly. So, when you choose a Norton—as assuredly you will, if your imagination can be fired by wonderful achievements, and your sense of values can be impressed by proved merits—you will buy the one machine that can give you *all* that you want, be it speed, staying power or sheer downright service.

NORTON MOTORS (1926) LTD.
BRACEBRIDGE STREET,
BIRMINGHAM.

The Unapproachable

Norton

Electric £135-0-0



£125-0-0

MODEL No. C.S.1. 4.90 H.P.

ENGINE. Overhead Cam Shaft. Bore 79 m-m. Stroke 100 m.m.
CAPACITY. 490 c.c.

The overhead cams are housed in an oil-tight aluminium box which is positively pressure-fed from the main mechanical pump, the cam shaft being mounted on and thrust taken by means of heavy duty ball bearings. The cam shaft is driven by a hollow vertical shaft through bevels, six splines being machined in the base of the vertical shaft on which the bottom bevel pinion is slidably mounted, which allows for overall expansion or contraction. The bottom bevel pinion is mounted on a large self-aligning ball bearing as a separate unit, and bolted inside the crankcase. Oil overflow from the rocker box after reaching a pre-determined level returns by means of the tubular cover of the vertical shaft to the sump, after having lubricated the timing gear and the bottom bevels which are entirely submerged in oil.

LUBRICATION. Constantly Pressure-fed Semi Dry Sump system.

CARBURETTER. Latest type 2-jet Semi Automatic.

MAGNETO. High tension waterproof. Located at the rear of the engine. Chain driven off engine shaft.

SILENCER (Registered Design). The gases pass by means of a 1¾in. diameter Exhaust Pipe, heavily nickel plated, to a double-chambered silencer of improved design with Fish Tail.

TRANSMISSION. Front Chain, ½in. x .305in.; Rear Chain, ⅝in. x ⅜in.
Suitably protected with a heavily nickel plated and black enamelled guard of handsome appearance.

GEAR BOX. Of entirely new type with instant adjustment, mounted by a patented method, and supported top and bottom by rigid transverse bosses and bolts. The gear box being pivoted on the bottom bolt for front chain adjustment.
Ratios optional. Sidecar: 4.42 6.5 13.0
Solo: 4.42 5.87 10.2
Close ratio (T.T.) gearbox can be supplied without kick starter. Ratios: 4.42, 5.8, 7.8

BRAKES. 8in. Internal Expanding Front Hub.
8in. Internal Expanding Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.

TYRES. 26 x 3.25 Heavy Wired type Cord Tyres.

PETROL TANK. Capacity, approximately 2½ gallons. Cellulose finish, in usual Norton colours.

SEPARATE OIL TANK. Capacity, approximately 4 pints. Cellulose finish in usual Norton colours.

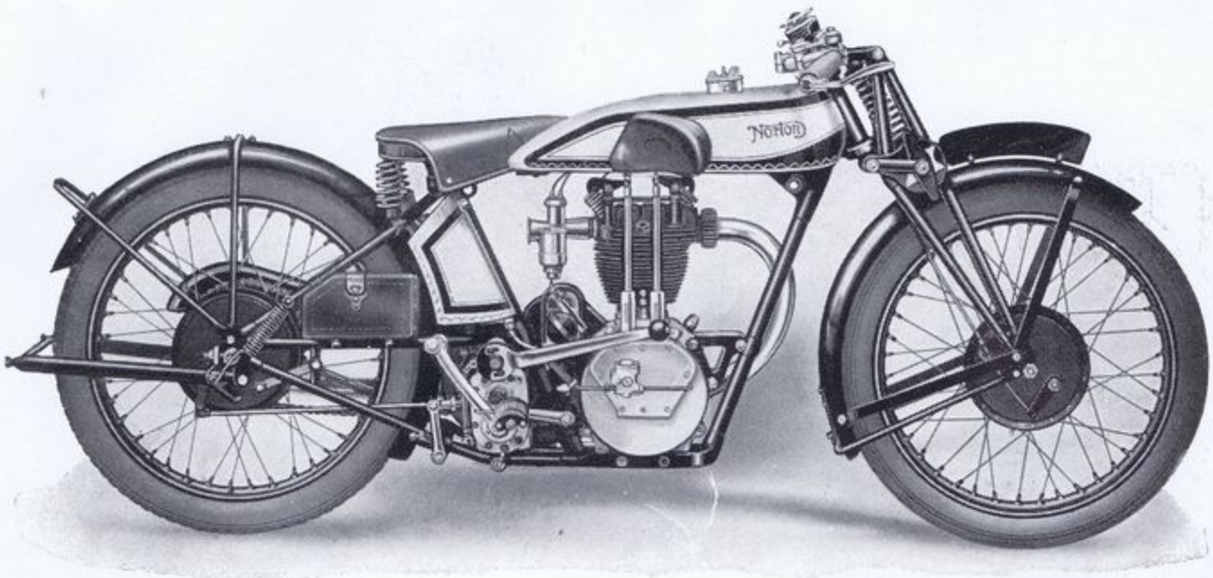
FRAME. Triangulated cradle type with complete protection for crankcase, incorporating the most modern scientific design and construction.

FORK. Very latest design, with steering damper mounted under steering head, adjustment being provided by means of a suitably placed wheel above the combination head clip.

SADDLE. Improved design, flexible top flat elastic, pivoted at nose, and mounted by means of two coil springs to seat stay lugs.

CARRIER. Optional.

Model No. CS1.
Code Word: CLENT.



MODEL No. E.S.2. O.H.V. 4.90 H.P.

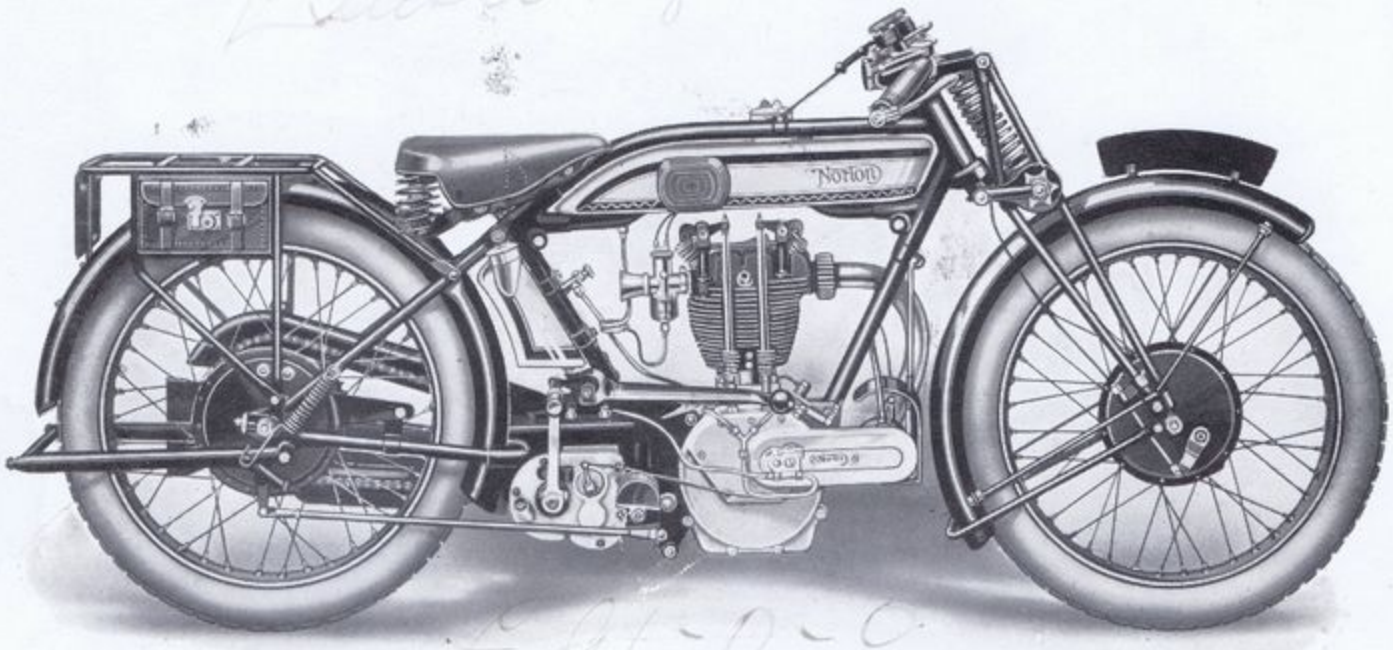
ENGINE. Push Rod Type. Bore 79 mm. Stroke 100 mm.
CAPACITY. 490 c.c.
The push rod return springs are totally enclosed, the engine in consequence maintains a clean appearance. The push rod bottom ends operate in an oil bath. The push rod top ends are oil loaded and specially designed rubber oil retaining covers are fitted. The timing gear of this engine has been entirely re-designed, giving higher efficiency and more silent running. Detachable and interchangeable cams are utilised.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
Alternatively constantly pressure-fed Semi Dry Sump System at an extra cost of £3 10s. 0d.
CARBURETTER. Latest type 2-jet Semi Automatic.
MAGNETO. High tension waterproof. Located at rear of the engine. Chain-driven off engine shaft.
SILENCER (Registered Design). The gases pass by means of a 1⅞in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved design with Fish Tail.
TRANSMISSION. Front Chain, ½in. x .305in.; Rear Chain, ⅝in. x ⅝in. Suitably protected with a heavily nickel-plated and black enamelled chain guard of handsome appearance.

Model No. ES2.
Code Word: CHIRK.

GEAR BOX. Of entirely new type with instant adjustment, mounted by a patented method, and supported top and bottom by rigid transverse bosses and bolts. The gear box being pivoted on the bottom bolt for front chain adjustment.
Ratios optional. Sidecar: 4.42 6.5 13.0 Solo: 4.42 5.87 10.2
Close ratio (T.T.) gearbox can be supplied without kick starter. Ratios: 4.42, 5.8, 7.8.
BRAKES. 8in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.
TYRES. 26 x 3.25 Heavy Wired Type Cord Covers.
PETROL TANK. Capacity approximately 2½ gallons. Cellulose finish in usual Norton colours.
SEPARATE OIL TANK. Capacity, approximately 4 pints.
FRAME. Triangulated cradle type with complete protection for crankcase, incorporating the most modern scientific design and construction.
FORK. Very latest design with steering damper mounted under steering head, adjustment being provided by means of a suitably placed wheel above the combination head clip.
SADDLE. Improved design, flexible top flat elastic, pivoted at nose and mounted by means of two coil springs to seat stay lugs.
CARRIER. Optional.

The Unapproachable

Norton



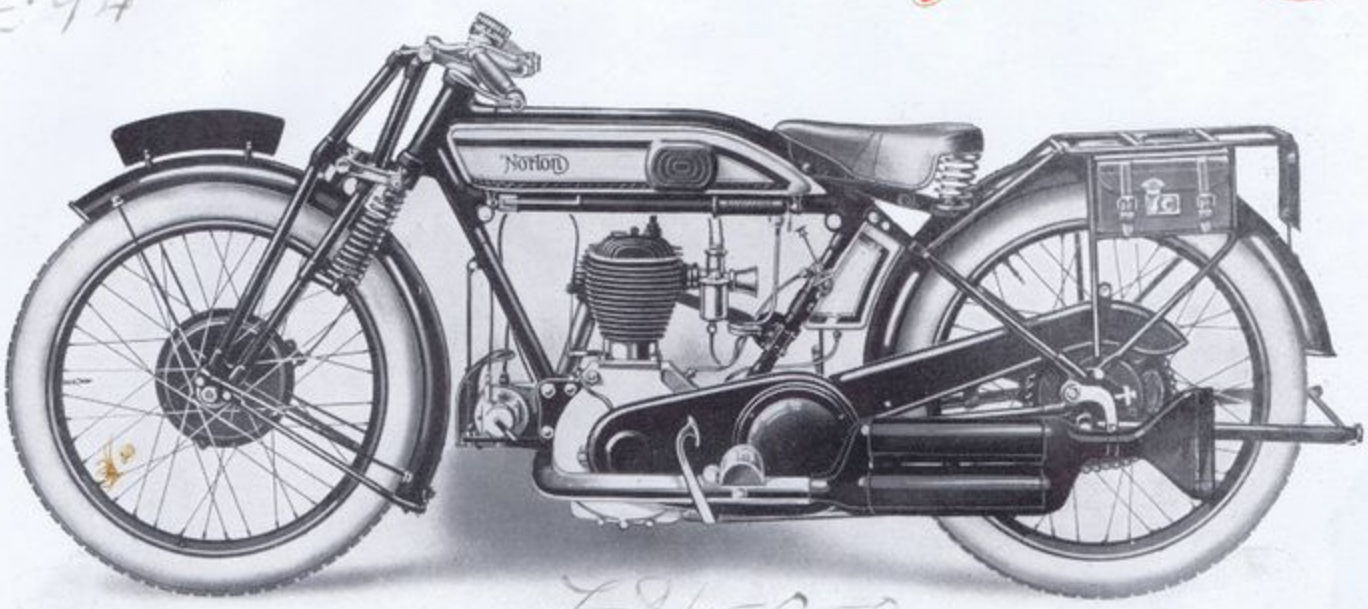
MODEL No. 19. 5.88 H.P.

ENGINE. O.H.V. Bore 79 mm. Stroke 120 mm.
CAPACITY 588 c.c.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
CARBURETTER. Approved variable jet type, bottom feed.
MAGNETO. High tension waterproof.
MAGNETO SHIELD. Of heavy gauge material, with rubber inserts fitted, protecting the Magneto from water and mud, preventing chafing of control and magneto cables.
SILENCER (Registered Design). The gases pass by means of a 1¾in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved design with Fish Tail fitted.
TRANSMISSION. By means of ⅝in. x ⅜in. Heavy Chains, suitably protected.
FRONT CHAIN LUBRICATION.
GEAR BOX. Specially designed. Three-speed with stubbed tooth pinions.
Ratios: Sidecar 5.02, 7.38, 13.26; Solo 4.47, 5.99, 9.67.
BRAKES. 7in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.
WHEELS. Front built of 10G Rustless Black Enamelled Spokes. Rear built of 8 x 10G Butted Rustless Black Enamelled Spokes.
TYRES. 26 x 3.25 Heavy Wired Type Cord Tyres.
PETROL TANK. Capacity approximately 2 gallons. Cellulose finish in usual Norton colours.
KNEE GRIPS. Adjustable fitted to Tank.
SEPARATE OIL TANK. Capacity, approximately 3½ pints. Cellulose finish in usual Norton colours.
FORKS. Of approved type incorporating latest practice, with STEERING DAMPER situated at the base of the steering head, adjustable by means of a suitably placed wheel on the steering head.
Fork illustrated is supplied for Solo use.
MUDGUARDS. 5in. "D" Section Front and Rear.
HANDLEBARS. Stemless, mounted on combination head clip, heavily nickel-plated, with long sports pattern rubber grips.
SADDLE. Improved design, flexible top flat elastic.
TOOL BAGS. Armoured of improved type.
TOOLS. Comprehensive kit.
INFLATOR. 18in. x ⅞in. Metal (Celluloid covered).
GROUND CLEARANCE. Approximately 4¼in.

Model No. 19.
Code Word: BRIAR.

Lucas Magdyno Lighting set, £ extra.

E.L. £94-0-0



£84-0-0

MODEL No. 16 H. 4.90 H.P.

ENGINE. Side Valve. Bore 79 mm. Stroke 100 mm.
CAPACITY. 490 c.c.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
CARBURETTER. Approved variable jet type, bottom feed.
MAGNETO. High tension water-proof.
MAGNETO SHIELD. Of heavy gauge material, with rubber inserts fitted, protecting the Magneto from water and mud, and preventing chafing of control and Magneto Cables.
SILENCER (Registered Design). The gases pass by means of a 1⅝in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved design with Fish Tail fitted.
TRANSMISSION. By means of ⅝in. x ⅜in. Heavy Chains, suitably protected against grit and mud.
FRONT CHAIN LUBRICATION.
GEAR BOX. Specially designed Three-Speed with stubbed tooth pinions.
Ratios: Sidecar 5.38, 7.91, 14.24; Solo 4.74, 6.96, 12.55.
Alternative close ratios for solo work: 4.74, 6.32, 10.25.
BRAKES. 7in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.
WHEELS. Front built of 10G Rustless Black Enamelled Spokes; Rear built of 8 x 10G Butted Rustless Black Enamelled Spokes.
TYRES. 26 x 3.25 Heavy Wired Type Cord Tyres.
PETROL TANK. Capacity approximately 2 gallons. Cellulose finish in usual Norton colours.
KNEE GRIPS. Adjustable fitted to Tank.
SEPARATE OIL TANK. Capacity, approximately 3½ pints. Cellulose finish in usual Norton colours.
FORKS. Of approved type incorporating latest practice, with STEERING DAMPER situated at the base of the steering head, adjustable by means of a suitably placed wheel on the steering head.
MUDGUARDS. 5in. "D" Section Front and Rear.
HANDLEBARS. Stemless, mounted on combination head clip, heavily nickel-plated, with long sports pattern rubber grips.
SADDLE. Improved design, flexible top flat elastic.
TOOL BAGS. Armoured of improved type.
TOOLS. Comprehensive kit.
INFLATOR. 18in. x ⅞in. Metal (Celluloid covered).
GROUND CLEARANCE. Approximately 4in.

Model No. 16H.
Code Word: ACTON.

Model No. 2.
Code Word: FLEET.

Model No. 2

As above, but fitted with Semi T.T. bars and footboards.

£85

Both models can be supplied with Lucas Magdyno Lighting set at £ extra.

The Unapproachable

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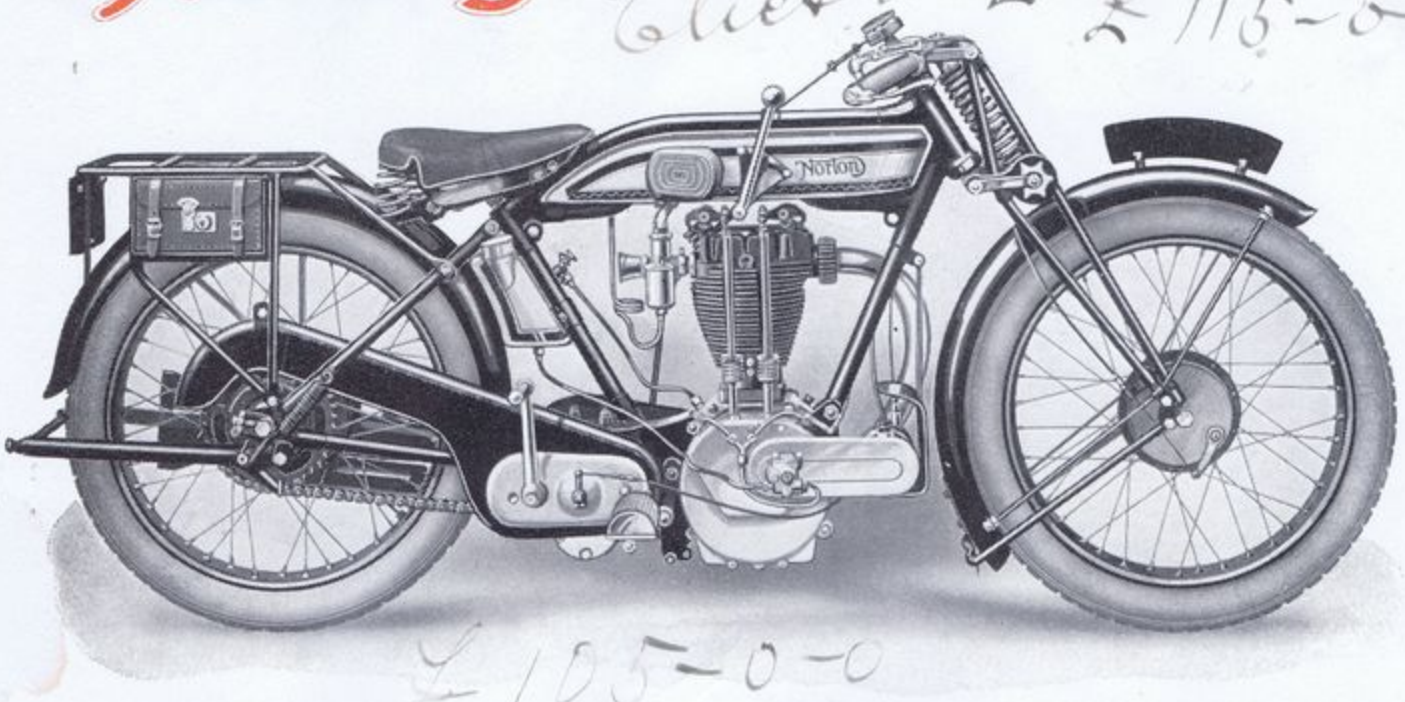
Electric £115-0-0



£105-0-0

MODEL No. 24. O.H.V. 5.88 H.P.

ENGINE. Bore 79 mm. Stroke 120 mm.
CAPACITY 588 c.c.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
CARBURETTER. Approved variable jet type, bottom feed.
MAGNETO. High tension water-proof.
MAGNETO SHIELD. Of heavy gauge material, with rubber inserts fitted, protecting the Magneto from water and mud and preventing chafing of control and Magneto Cables.
SILENCER (Registered Design). The gases pass by means of a 1¾in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved registered design with Fish Tail fitted.
TRANSMISSION. By means of ⅝in. x ⅜in. Heavy Chains. Front Chain totally enclosed.
FRONT CHAIN LUBRICATION.
GEAR BOX. Specially designed Four-Speed Gear Box incorporating the very latest practice, staggered drive.
Ratios: Sidecar 5.0, 6.50, 8.44, 14.94; Solo 4.45, 5.78, 7.50, 13.28.
BRAKES. 7in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.
WHEELS. Front built of 10G Rustless Black Enamelled Spokes; Rear built of 8 x 10G Butted Rustless Black Enamelled Spokes.
TYRES. 26 x 3.25 Heavy Wired Type Cord Tyres.
PETROL TANK. Capacity, approximately 2¼ gallons. Cellulose finish, in usual Norton colours.
KNEE GRIPS. Adjustable fitted to Tank.
SEPARATE OIL TANK. Capacity, approximately 3½ pints. Cellulose finish, in usual Norton colours.
FORK. Dual action with Lamp Bracket Lugs incorporated. STEERING DAMPER specially adapted of improved design. Fork illustrated is for Solo use.
MUDGUARDS. Front 5in. "D" Section with Side Valances. Rear 7in. "D" Section.
HANDLEBARS. Stemless, mounted on combination head clip, heavily nickel-plated, with long sports pattern rubber grips.
SADDLE. Improved design, flexible top flat elastic.
TOOL BAGS. Armoured of improved type.
TOOLS. Comprehensive kit.
INFLATOR. 18in. x ⅞in. Metal (Celluloid covered).
GROUND CLEARANCE. Approximately 4in.

Model No. 24.
Code Word: CERES.

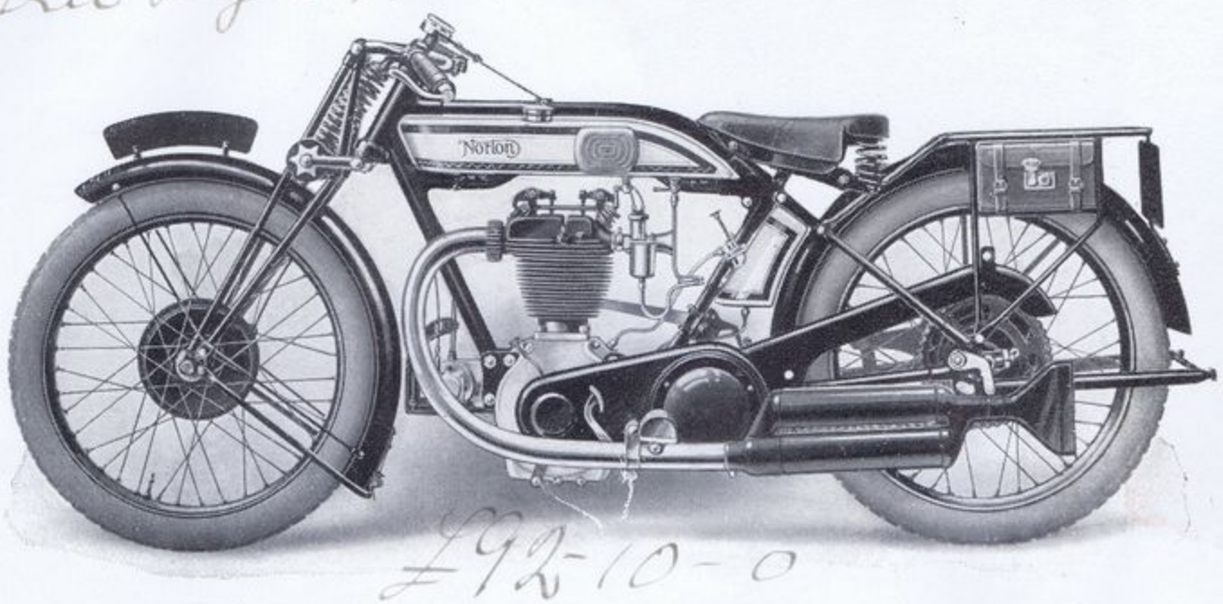
Model No. 44.
Code Word: IDEAL.

Model No. 44

As above but with Colonial type frame similar to Model No. 1; ground clearance approximately 6½in.

Both models can be supplied with Lucas Magdyno Lighting set at £ extra.

Electric Light £102-10-0



£92-10-0

MODEL No. 18. O.H.V. 4.90 H.P.

ENGINE. Bore 79 mm. Stroke 100 mm.
CAPACITY 490 c.c.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
CARBURETTER. Approved variable jet type, bottom feed.
MAGNETO. High tension water-proof.
MAGNETO SHIELD. Of heavy gauge material, with rubber inserts fitted, protecting the Magneto from water and mud and preventing chafing of control and Magneto Cables.
SILENCER (Registered Design). The gases pass by means of a 1¾in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved design with Fish Tail fitted.

Model No. 18.
Code Word: ASCOT.

TRANSMISSION. By means of ⅝in. x ⅜in. Heavy Chains, suitably protected against grit and mud.
FRONT CHAIN LUBRICATION.
GEAR BOX. Specially designed Three-Speed with stubbed tooth pinions.
Ratios: Sidecar 5.02, 7.38, 13.26; Solo 4.47, 5.99, 9.67.
BRAKES. 7in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.

Model No. 21.
Code Word: GIPSY.

WHEELS Front built of 10G Rustless Black Enamelled Spokes; Rear built of 8 x 10G Butted Rustless Black Enamelled Spokes.
TYRES. 26 x 3.25 Heavy Wired Type Cord Tyres.
PETROL TANK. Capacity, approximately 2 gallons. Cellulose finish, in usual Norton colours.
KNEE GRIPS. Adjustable fitted to Tank.
SEPARATE OIL TANK. Capacity, approximately 3½ pints. Cellulose finish, in usual Norton colours.
FORK. Of approved type fitted with Shock Absorbers incorporating Hand Adjusters and with Lamp Bracket Lugs.

Model No. 34.
Code Word: HAZEL.

STEERING DAMPER. Specially adapted of improved design.
MUDGUARDS. 5in. "D" Section Front and Rear
HANDLEBARS. Stemless, mounted on combination head clip, heavily nickel-plated, with long sports pattern rubber grips.
SADDLE. Improved design, flexible top flat elastic.
TOOL BAGS. Armoured of improved type.
TOOLS. Comprehensive kit.
INFLATOR. 18in. x ⅞in. Metal (Celluloid covered).
GROUND CLEARANCE approximately 4¼in.

101-0-0

Model No. 21 As above, but lubrication of the constant circulation Semi Dry Sump type. £ L 111-0-0

Model No. 34 As Model 18, but fitted with 4-speed gear box.

All the above models can be supplied with Lucas Magdyno Lighting set at £ extra.

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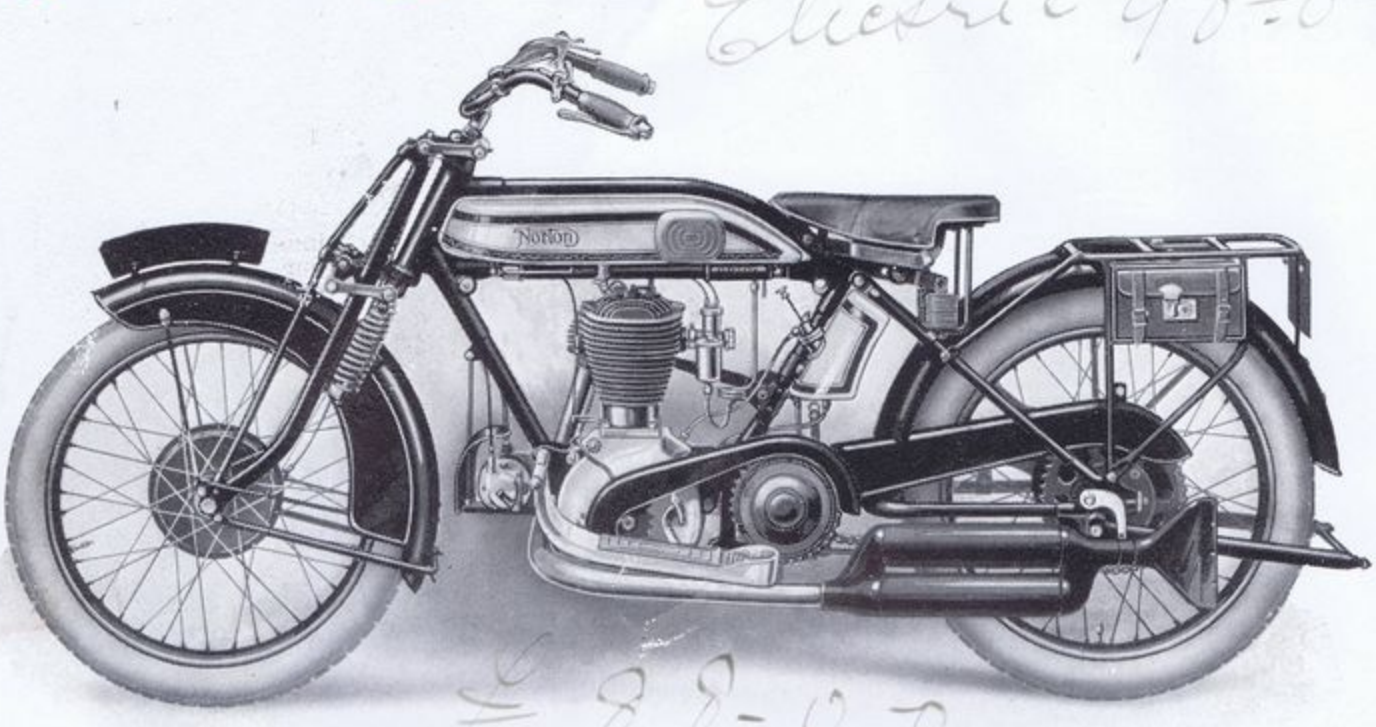
Norton



MODEL No. 1. "BIG FOUR" 6.33 H.P.

ENGINE. Side Valve. Bore 82 mm. Stroke 120 mm.
CAPACITY 633 c.c.
LUBRICATION. Positive pressure mechanical pump, regulated without restricting oil feed passage. Auxiliary hand pump also provided.
CARBURETTER. Approved variable jet type, bottom feed.
MAGNETO. High tension water-proof.
MAGNETO SHIELD. Of heavy gauge material, with rubber inserts fitted, protecting the Magneto from water and mud and preventing chafing of control and Magneto Cables.
SILENCER (Registered Design). The gases pass by means of a 1½in. diameter Exhaust Pipe, heavily nickel-plated, to a double chambered Silencer of improved design with Fish Tail fitted.
TRANSMISSION. By means of ⅝in. x ⅜in. Heavy Chains, suitably protected.
FRONT CHAIN LUBRICATION.
GEAR BOX. Specially designed Three-Speed with stubbed tooth pinions.
Ratios: Sidecar 5.38, 7.91, 14.24; Solo 4.74, 6.96, 12.55.
BRAKES. 7in. Internal Expanding Brake Front Hub.
8in. Internal Expanding Brake Rear Hub. The latter incorporating Patent Shock Absorbing Device. Cup and Cone Bearings are utilised.
WHEELS. Front built of 10G Rustless Black Enamelled Spokes; Rear built of 8 x 10G Butted Rustless Black Enamelled Spokes.
TYRES. 26 x 3.25 Heavy Wired Type Cord Tyres.
PETROL TANK. Capacity approximately 2¼ gallons. Cellulose finish, in usual Norton colours.
KNEE GRIPS. Adjustable fitted to Tank.
SEPARATE OIL TANK. Capacity, approximately 3½ pints. Cellulose finish, in usual Norton colours.
FORK. Dual action with Lamp Bracket Lugs incorporated.
MUDGUARDS. Front 5in. "D" Section with Side Valances. Rear 7in. "D" Section.
HANDLEBARS. Semi T.T. or Touring pattern, Celluloid covered, with Rubber Grips.
SADDLE. Improved design, flexible top flat elastic.
TOOL BAGS. Armoured of improved type.
TOOLS. Comprehensive kit.
INFLATOR. 18in. x ⅞in. Metal (Celluloid covered).
GROUND CLEARANCE. Approximately 6½in.

Model No. 1.
Code Word: AVOCA.

Model No. 14.
Code Word: ELGIN.

Model No. 17C.
Code Word: EPSOM.

Model No. 14

As above, but fitted with 4-speed gear box.
Ratios: Sidecar 5.34, 6.95, 9.01, 15.95;
Solo 4.7, 6.11, 7.93, 14.01. Chains totally enclosed.

Model No. 17c.

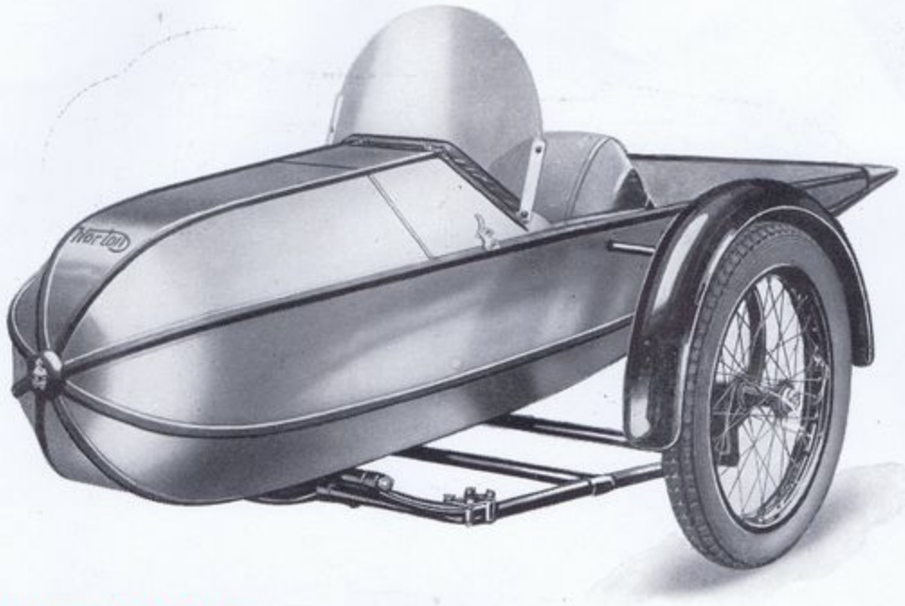
As Model No. 1, but with 490 c.c. Engine as fitted to Model 16H.

All these models can be supplied with Lucas Magdyno Lighting set at £ extra.

SIDECAR MODELS for 1928

THE SUPER SPORTS SIDECAR. MODEL F.

Code Word: "**Eagle.**"



Sidecar Model F.

Of pleasing lines, panelled in polished aluminium, supported where necessary on best quality three-ply. The body is lined to match the tank, and has been designed to give the maximum amount of comfort at the same time retaining the essential sporting characteristics. The body is built on a hard wood frame and is supplied with a sprung back and hammock seat. It is equipped with dash and screen and is fitted with best quality twill cover-all apron

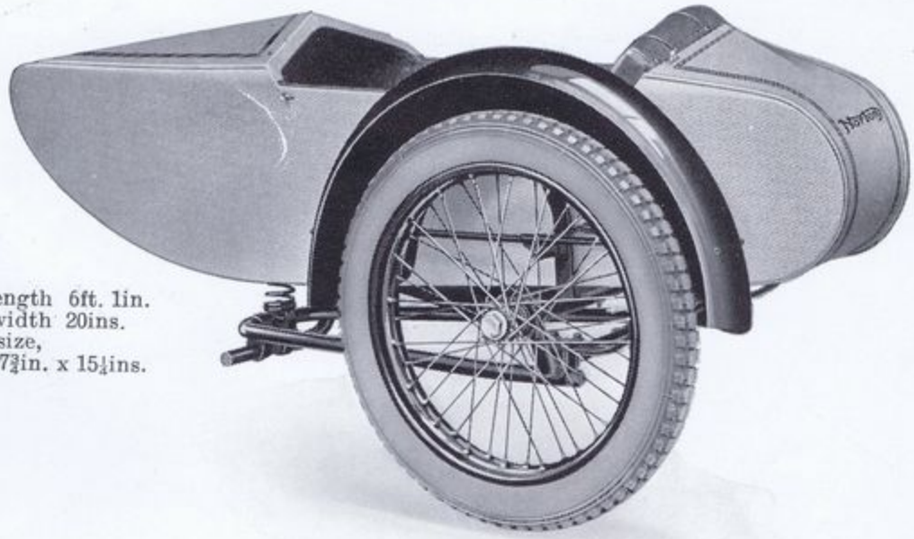
The chassis is of the well-known Norton type, having four-point connections, and designed to form an integral part of the Norton frame. It is built throughout with best quality weldless steel tubing. The body is mounted at the nose on two 4-leaf springs and at the rear with two 4-leaf "C" springs, giving exceptional springing qualities and entire freedom from vibration. Overall length of body 90in. Inside length of body 54in. Seat length 26in. Depth of back seat 17in.

THE "SPORTS" SIDECAR. MODEL J.

Code Word: "**Dover.**"

This type of body embodies all the graceful lines of a Sporting Outfit, combined with the comfort of a Touring Sidecar. Framework well constructed of seasoned timber, covered in good quality plywood. Externally covered in a durable weather proof fabric in a colour which harmonises with the motor cycle. Interior trimming artistically finished in a good quality leather cloth to suit exterior colour. Cushion, which is well padded and sprung, is sunk into a well to give a low, comfortable seating position. Squab hinges forward, providing a roomy locker for spares, etc.

Sidecar Model J.



Overall length 6ft. 1in.
Overall width 20ins.
Cushion size,
17¾in. x 15¼ins.

The Unapproachable

Norton

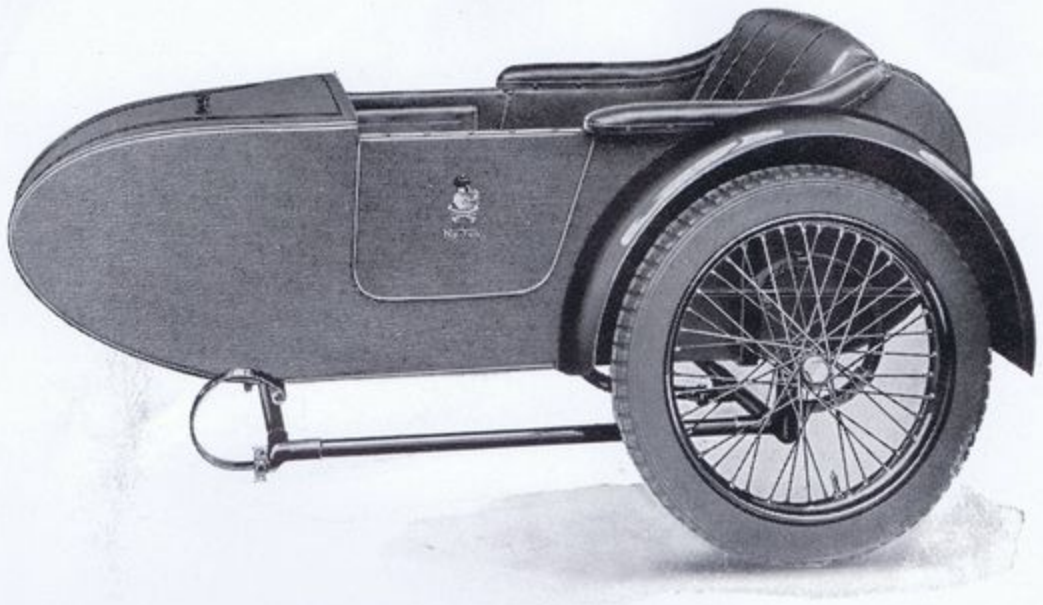
SIDECAR MODELS for 1928

TOURING MODEL G SIDECAR.

Code Word: "**Aztec.**"

A roomy, comfortable body, suitable for medium or high-powered machines. Designed for long touring without fatigue. Every consideration given to detail and finish. Framework soundly constructed of well seasoned timber, covered in good quality plywood. Externally covered in a durable weather-proof fabric in a colour which harmonises well with the motor cycle. Interior trimming artistically finished in good quality leather cloth to suit exterior colour. Well sprung and padded cushion. Squab hinges forward, providing a spacious locker at rear for spares, etc.

Overall length 5ft. 5½ins.
Overall width 19¼in.
Cushion size 15½ins. x 15¼ins.

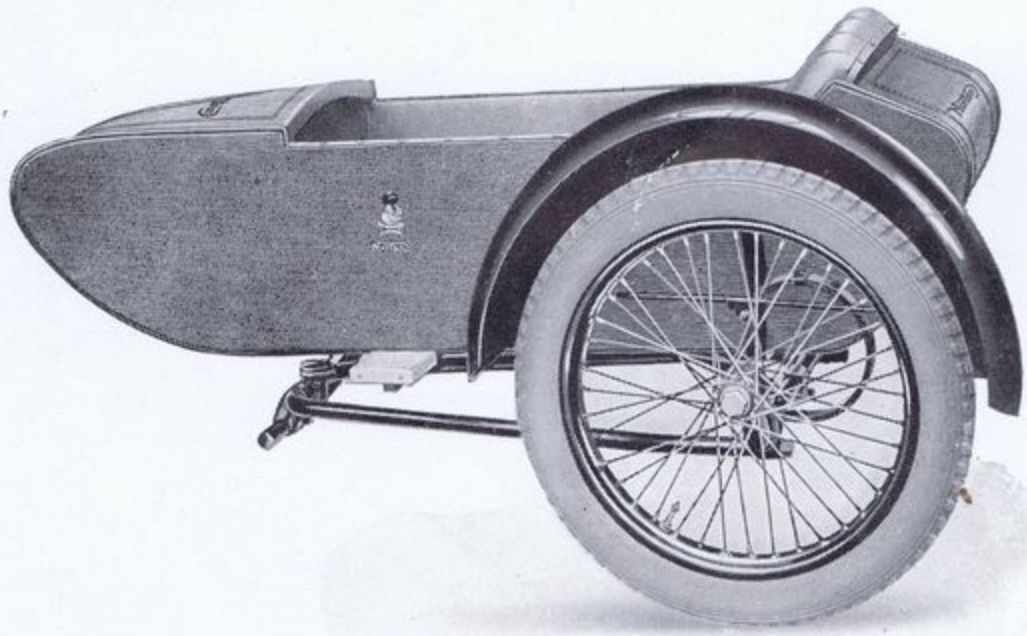


Sidecar Model G.

LIGHT TOURING MODEL H SIDECAR.

Code Word: "**Delta.**"

The chief consideration in the design of this body is to provide a sidecar of moderate price without sacrificing anything in the way of personal comfort or finish in details. Framework soundly constructed and covered in good quality plywood. Externally covered in a durable weatherproof fabric in a colour which harmonises well with the motor cycle. Interior trimming of a good quality leather cloth to suit exterior colour. Well sprung and padded cushion. Squab hinges forward, providing a roomy locker at rear for spares, etc.



Overall length 5ft. 2½ins.
Overall width 19¼ins.
Cushion size,
15½ins. x 15¼ins.

Sidecar Model H.

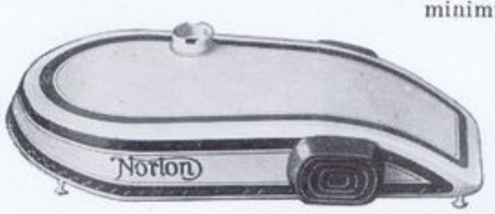
Concerning MECHANICAL DETAILS

In order to supplement the specifications given in the preceding pages the following details are given. The numbers found under the illustrations are quoted also in the text for easy reference.

1

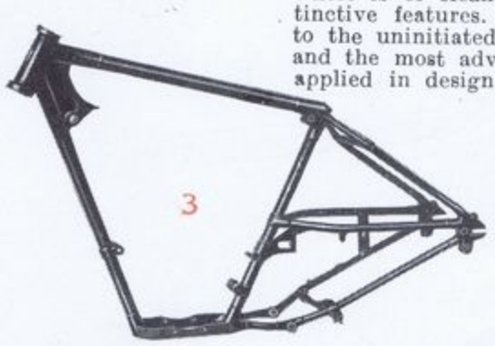
The **CYLINDER** of the 16H. Model (illustration No. 1) is, like all Norton Cylinder castings, made of the best quality fine grey iron, which is entirely free from porosity.

The type of **TANK** illustrated (illustration No. 2) is the well-known Big Four, of Norton finish and of ample capacity. Each individual Tank is subjected to air pressure before being put into use. Adjustable Knee Grips are fitted to all models.



2

The cradle type **FRAME**, of triangulated design illustrated (illustration No. 3), is the one used in the building of the C.S.1 and E.S.2 Models, giving exceptional lateral stability with a low riding position, and reducing to a minimum the risk of skidding. Torque tubes to the fork ends are employed in the design, which absorb all torsional stresses of the transmission.



3

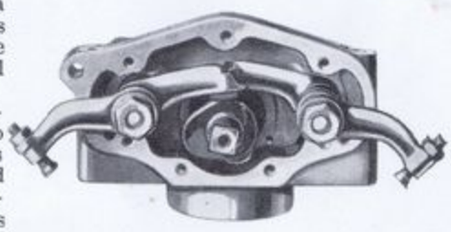
(Illustration No. 4). This is the Norton aluminium **PISTON**, as fitted to O.H.V. Models. Every attention has been paid to Piston design, and uniform thickness of metal is employed. Strong strengthening webs are incorporated in the design of the Piston.

4

The **CYLINDER HEAD** (illustration No. 5) is of the O.H.C. type and is quickly detachable for decarbonising. Particular attention has been paid to the provision of large port areas, allowing free passage of the gases.

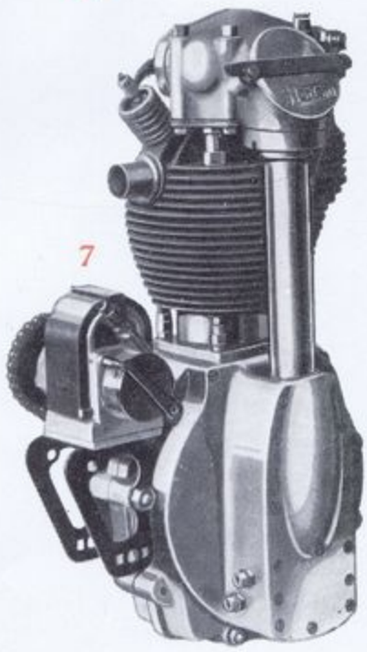
5

The **OVERHEAD CAMSHAFT ROCKER BOX** (Illustration No. 6) has an aluminium cover, which has been removed for the purposes of illustration, which shows the Rockers and Cams in position.



6

The **CAMSHAFT ENGINE** (illustration No. 7) has already won for itself a reputation second to none. Never in the annals of history has an engine put up such a wonderful performance. It will be seen that the corners are all rounded off and symmetrical, and that the whole is of clean design and has many distinctive features. It is quite evident, even to the uninitiated that the utmost thought, and the most advanced knowledge has been applied in design.



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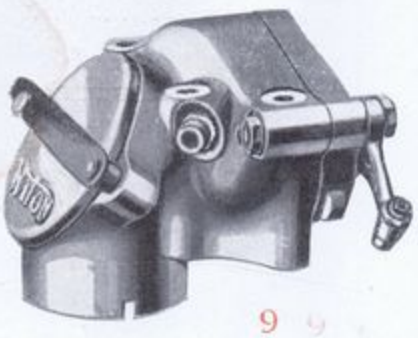

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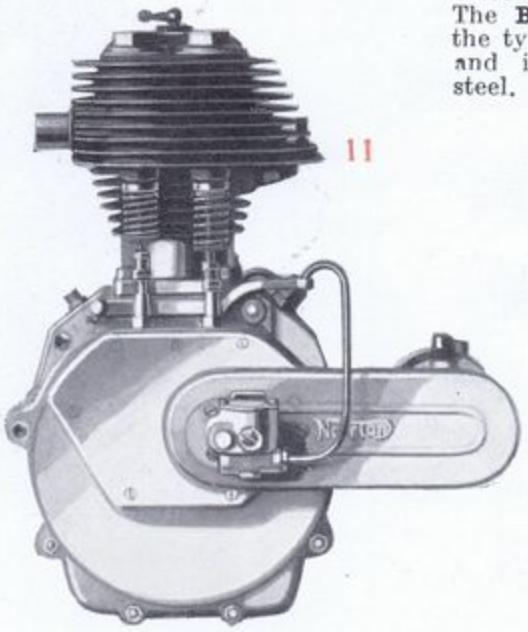


11

The **CYLINDER HEAD** (illustration No. 8) is of the type fitted to the O.H.V. Push Rod operated engine, and has deep radiating fins, ensuring that the heat is quickly diffused.

No. 9 illustrates the **OVERHEAD ROCKER BOX**, as illustration No. 6, but with vertical shaft inspection cover in position. The method of supplying oil will be observed. It should be mentioned that after the predetermined oil level has been reached this returns by means of the tubular cover of the vertical shaft to the sump.

The **CAMS AND ROCKERS** (illustration No. 10) show the large bearing surfaces provided.

The 4.90 **NORTON ENGINE** fitted to the popular 16H. Model is here shown (illustration No. 11). It has been rightly described as the fastest side valve model extant.

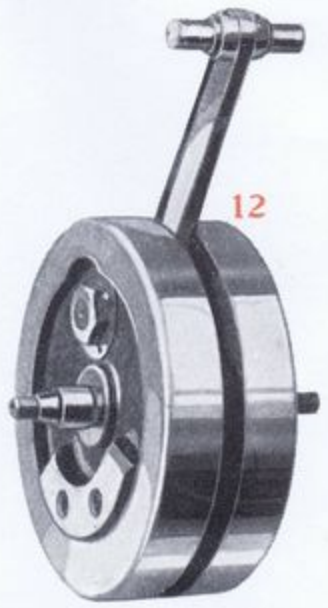
Illustration No. 12. **FLYWHEELS** fitted up with connecting rod, crank pin and gudgeon pin bearings, the shafts are mounted on bearings of ample proportions, and are fitted to the flywheels by means of a special process.

The **CONNECTING ROD** (illustration No. 13) is an alloy steel drop forging in H. Section. The large and small end housings are extremely well supported. The Rod is specially heat treated, and the big end bearing shows the double row rollers and the large bearing surfaces provided.

NORTON VALVES (illustration No. 14 and 15) are manufactured of a special alloy steel. Illustration No. 14 is the valve fitted to the Side Valve Engines.

Illustration No 15 is the Valve used in the O.H.V. and O.H.C. type engines. It will be observed that inner and outer valve springs are in position, a star washer forming the cup or collar, and a specially designed tapered cup is provided in which the valve split cotters are housed.

The **BRAKE PEDAL** (illustration No. 16) is the type used on the C.S.1 and E.S.2 Models, and is made of a specially high tensile steel.



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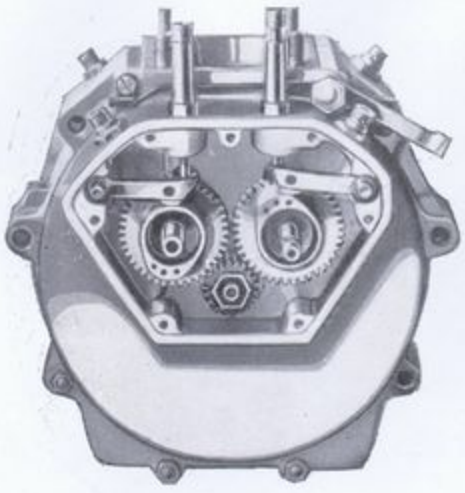


17

The **NORTON CRANKCASE** is here shown (illustration No. 17), the timing gear cover of which has been removed, showing the Cams, Rockers, and Timing Pinion in position. The Crankcase is a fine quality aluminium die casting, and has a special finish.

Cast Iron **PISTONS** (illustration No. 18) are fitted to all side valve Models unless otherwise specified. It will be observed that oil trapping channels are incorporated, and that two concentric Piston Rings are used.

The **CYLINDER BARREL** (illustration No. 19) is the type used in the O.H.V. Push Rod operated engines. This illustration admirably shows the deep radiating fins which are characteristic of all Norton Cylinders.

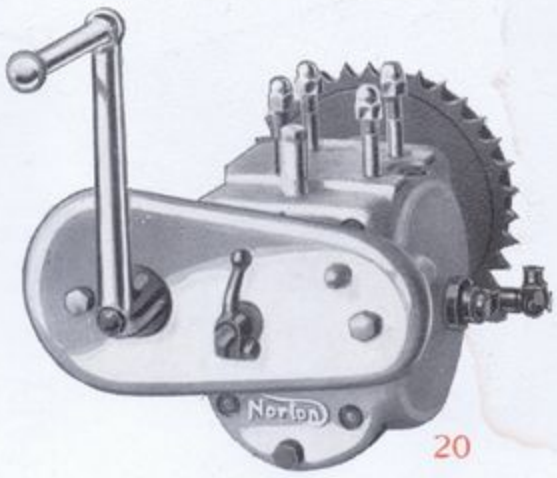
The well-known **NORTON FOUR-SPEED GEAR BOX** (illustration No. 20) represents a distinct advance in modern Gear Box designs, and provides four most convenient ratios with exceptional efficiency. The gears are in constant mesh for the full width of the teeth under all conditions, they are not moved laterally on the shafts, but the changes are made by sliding dogs, reducing damage to the gear teeth to a minimum.

Illustration No. 21 shows the method of carrying the **OVERHEAD ROCKERS** on Push Rod operated O.H.V. engines.

This Illustration No. 22 depicts the **ENGINE OF THE MODEL E.S.2** machine, the push rod return springs of which are totally enclosed. The timing gear is of high efficiency and is silent running. The Ports have been designed to give the highest efficient stream-lined effect. The exhaust port is offset to permit the use of a straight exhaust pipe.

18

19



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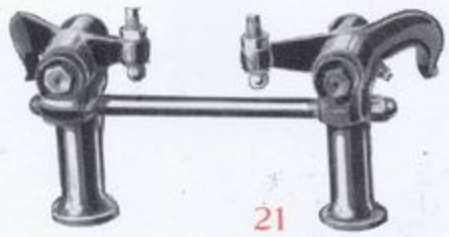

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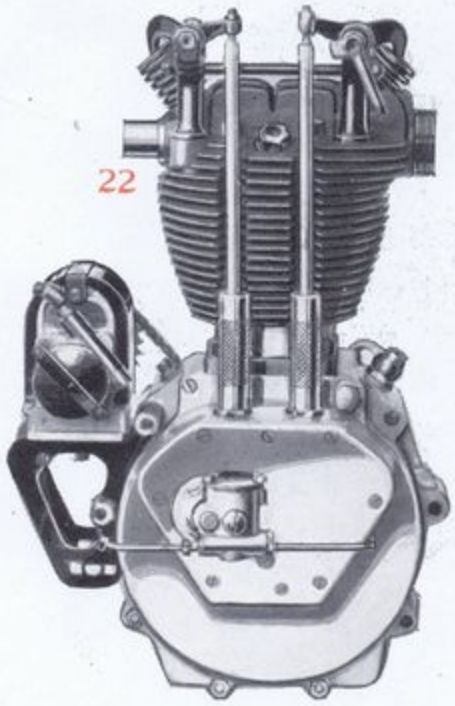

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24

The top illustration (No. 23) shows the entirely new and scientifically tested type of Norton registered design **DOUBLE CHAMBER SILENCER,** which has been evolved as a result of much research work based on modern acoustic formula.

The handsome and well-designed **NORTON OIL BOX** (illustration No. 24) has been slightly modified to give a more symmetrical appearance.

Illustration No. 25 shows the **NORTON O.H.V. ENGINE,** Push Rod operated, which has performed so wonderfully on road and track in all parts of the World, and possibly carries more successes than any other engine extant.

No. 26 illustrates, in conjunction with illustration No. 27 the **SHOCK ABSORBER** incorporated in the rear wheel hub. The vanes are clearly indicated, giving the shock absorbing effect when these are brought into contact with the rubber buffers shown in the hub of the wheel in Illustration No. 27.

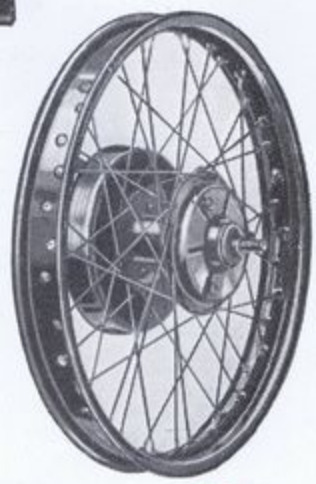
Every attention has been paid to design of **NORTON WHEELS** (illustration No. 27). The illustration shows the large diameter 8in. brake drum, which is detachable from the Hub shell, and also the well base Wired type Rim. 8 x 10 gauge butted Spokes are used in building.

The **NORTON FRONT HUB** (illustration No. 28), like the rear Hub, is fitted with cup and cone bearings, front and rear bearings being inter-changeable.

No. 29 illustrates the **OVERHEAD ROCKER** of O.H.V. Engine, showing the rocker bearing bolt, made of a special alloy steel spindle, and running on a roller bearing. The rollers are fitted in a phosphor bronze housing, and lubricated by means of the grease gun nipple illustrated.

Illustration No. 30 shows the Norton pattern **STEMLESS HANDLEBARS,** mounted on the head by means of suitable clips. The Handlebars are made of best quality weldless Steel tubing, heavily nickel plated, and the long sports pattern Rubber Grips will be observed.

26



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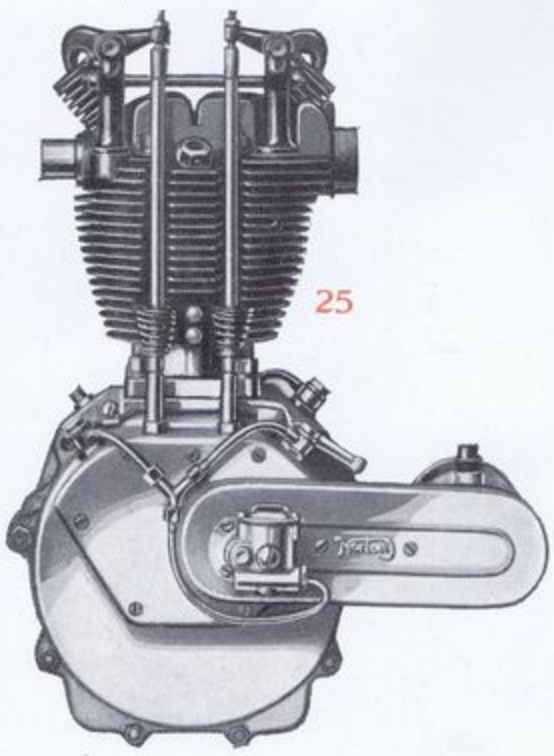
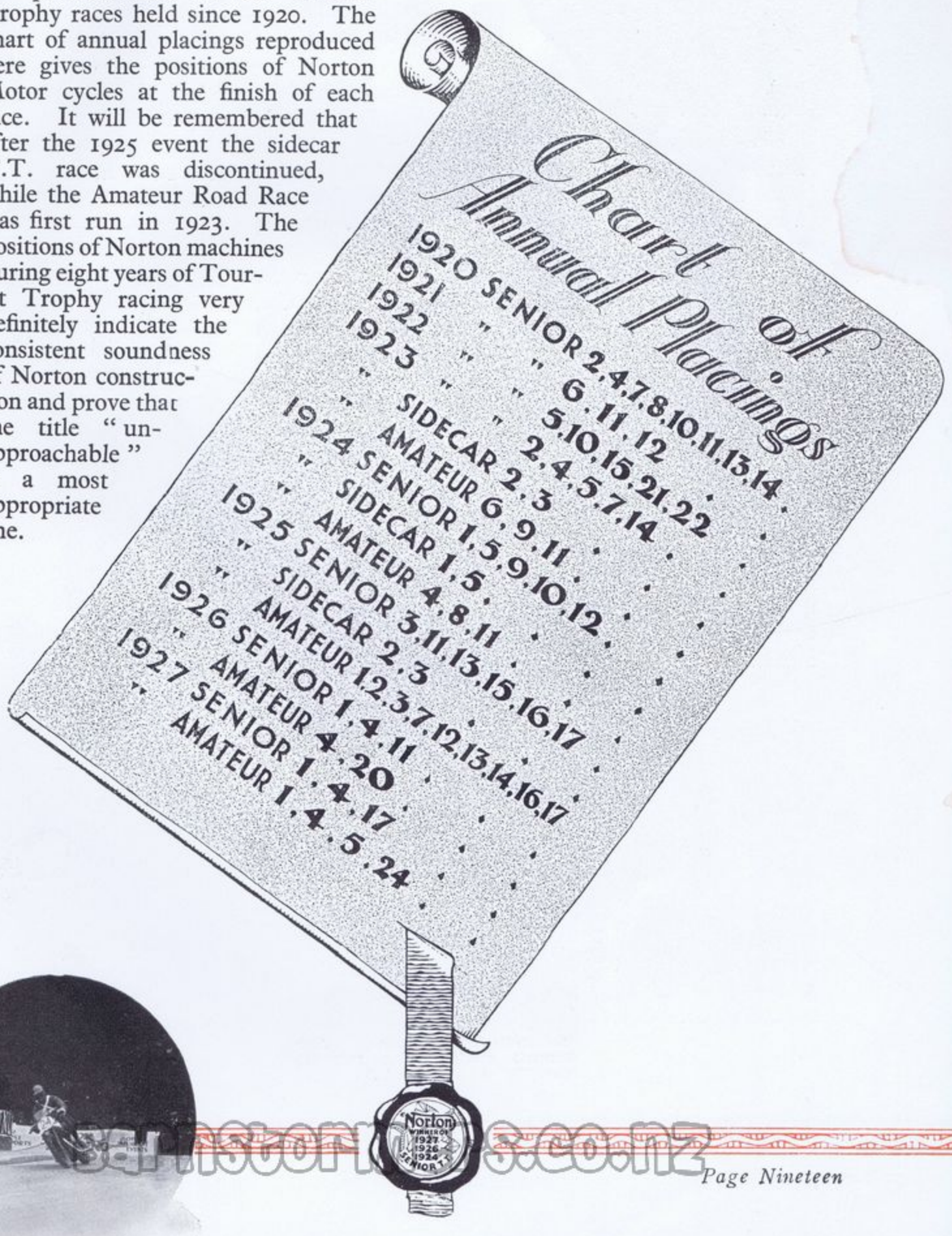


25

30

POST WAR T.T. PLACINGS

THOUGH this Booklet deals essentially with successes gained during the past season, it is interesting to compare Norton performances in the Tourist Trophy races held since 1920. The chart of annual placings reproduced here gives the positions of Norton Motor cycles at the finish of each race. It will be remembered that after the 1925 event the sidecar T.T. race was discontinued, while the Amateur Road Race was first run in 1923. The positions of Norton machines during eight years of Tourist Trophy racing very definitely indicate the consistent soundness of Norton construction and prove that the title "unapproachable" is a most appropriate one.



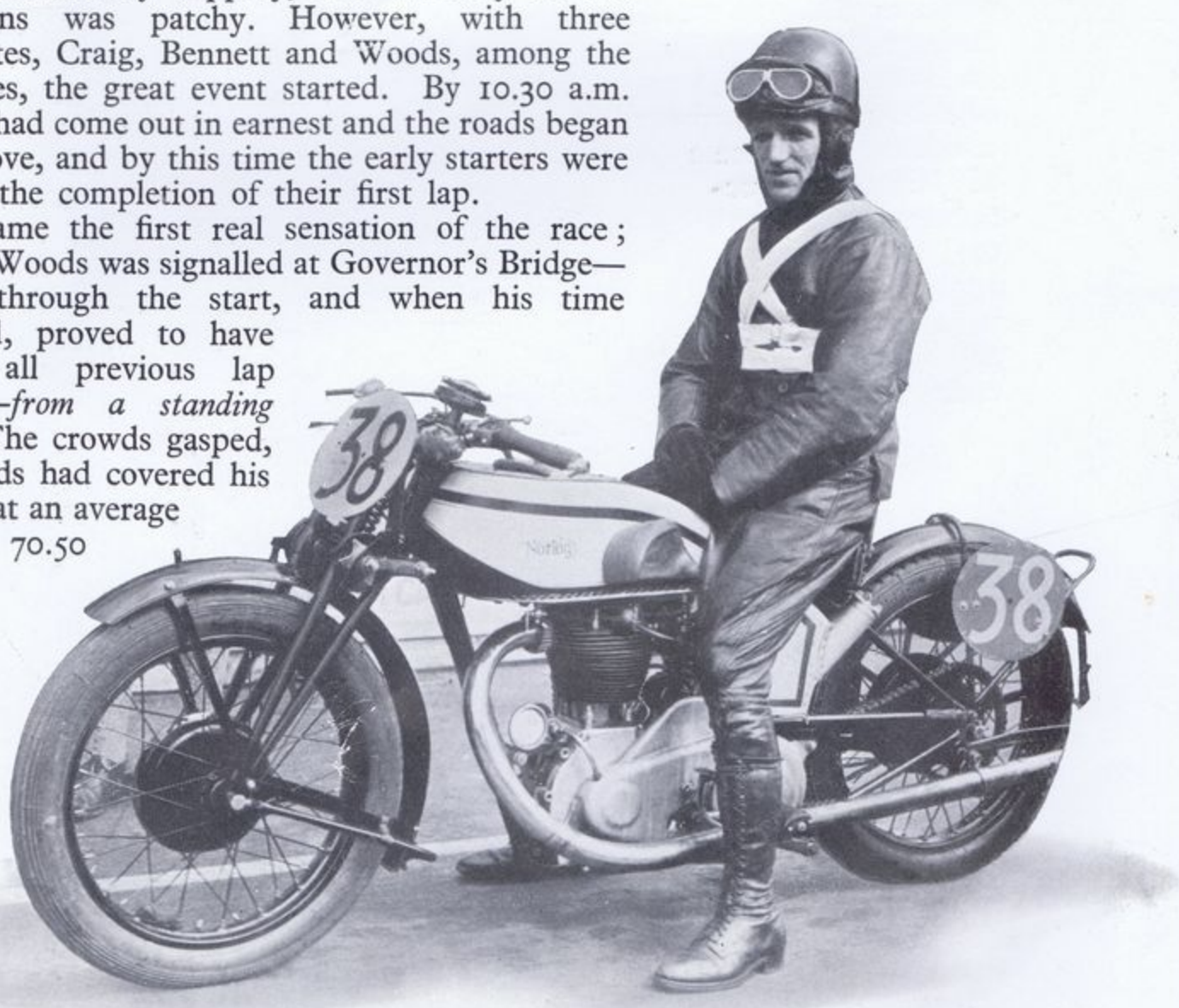
The Unapproachable Norton

The Great SENIOR T.T. RACE

BREAKFASTING to the accompaniment of rain tumbling along the gutters and pattering on the roof like small shot, surely the hearts of T.T. riders must have been somewhere in the region of their boots on Friday, June 17th, the day of the Senior International Tourist Trophy race of 1927. This was going to be a slow race, the experts decided.

But by 8 o'clock the fog began to lift, and before the start at 10 a.m., some little improvement was noted. Still the tarred road surfaces were treacherously slippery, and visibility on the mountains was patchy. However, with three Nortonites, Craig, Bennett and Woods, among the favourites, the great event started. By 10.30 a.m. the sun had come out in earnest and the roads began to improve, and by this time the early starters were nearing the completion of their first lap.

Then came the first real sensation of the race; Stanley Woods was signalled at Governor's Bridge—passed through the start, and when his time appeared, proved to have beaten all previous lap records—*from a standing start*. The crowds gasped, for Woods had covered his first lap at an average speed of 70.50 m.p.h.



The smile of confidence. Alec Bennett awaiting his turn to start for the Senior T.T.

Alec Bennett rounding Governor's Bridge on his last lap and passing the finishing post—with nine minutes in hand.

ON his second lap Stanley put up another record—31 minutes, 54 seconds—the first time 32 minutes have been beaten—70.99 m.p.h.

Meanwhile that world famous rider, Alec Bennett, was quietly boring his way into the ranks of the leading half-dozen—at the same time nursing his mount, and taking no undue risks that would spoil his chance of winning. Alec is one of those experienced riders who believes in keeping a little bit of speed in reserve. So at the end of the first lap his position is 5th and during the second, slightly increasing his speed he climbs into fourth place. Again, " turning the tap on " a little harder during the third lap, Bennett had jumped into third place, and he and Woods seemed to be making the race their own, for by the end of lap four Bennett is a close second to Woods First.

Then disaster overcame Woods, for in the fifth lap he toured in with clutch trouble and retired—and Bennett took first place with nine minutes in hand. During lap six, this indomitable rider held his position and by the end of this lap, with his wonderful judgment and carefully gauged speed, he had the race won—if fortune dealt no unkind blow. And in the seventh and final lap Alec Bennett went round with never a falter, winning a glorious race in brilliant style in 3 hours, 51 minutes, 42 seconds—an average speed of 68.41 m.p.h., and a record for the course. Incidentally, it is worthy of notice that, such is the lasting qualities of the Norton that Alec Bennett's final lap of 32 minutes, 23 seconds (over 69 m.p.h.), was the fastest he had accomplished during the race!

And so, once more—for the third time in four years—"The Senior" is won by the unapproachable Norton.

TOP ROW, left to right. (1) Alec Bennett being congratulated upon his Senior T.T. Victory. (2) Bennett just having passed another rider on Ramsey Hairpin. (3) Mr. C. W. Provis, who was fourth in the Amateur T.T. (4) Mr. J. C. Vaughan (Norton) neatly passing another competitor on the inside at Governors Bridge during the Amateur T.T. (5) Mr. P. Hunt, of Southport, winner of the Amateur T.T towards the end of his strenuous ride.
MIDDLE (6) Len Stewart, the popular Australian rider, at the start of the Senior T.T. (7) Jimmy Shaw, the well-known Irish Nortonite, in a characteristic riding attitude. (8) Mr. P. Hunt, the 19 year old Amateur T.T. winner, with his Trophy.
BOTTOM. (9) Stanley Woods, Senior T T., negotiating Parliament Square, Ramsey. (10) Mr. H. Matthews, Manchester, on his Norton in the Amateur T.T., and (11) Mr. L. A. Reid (Norton) in the same race.

Norton WINNER OF 1927 1926 1924 SENIOR T.T.

The Unapproachable

Norton

The Wonderful AMATEUR T.T.

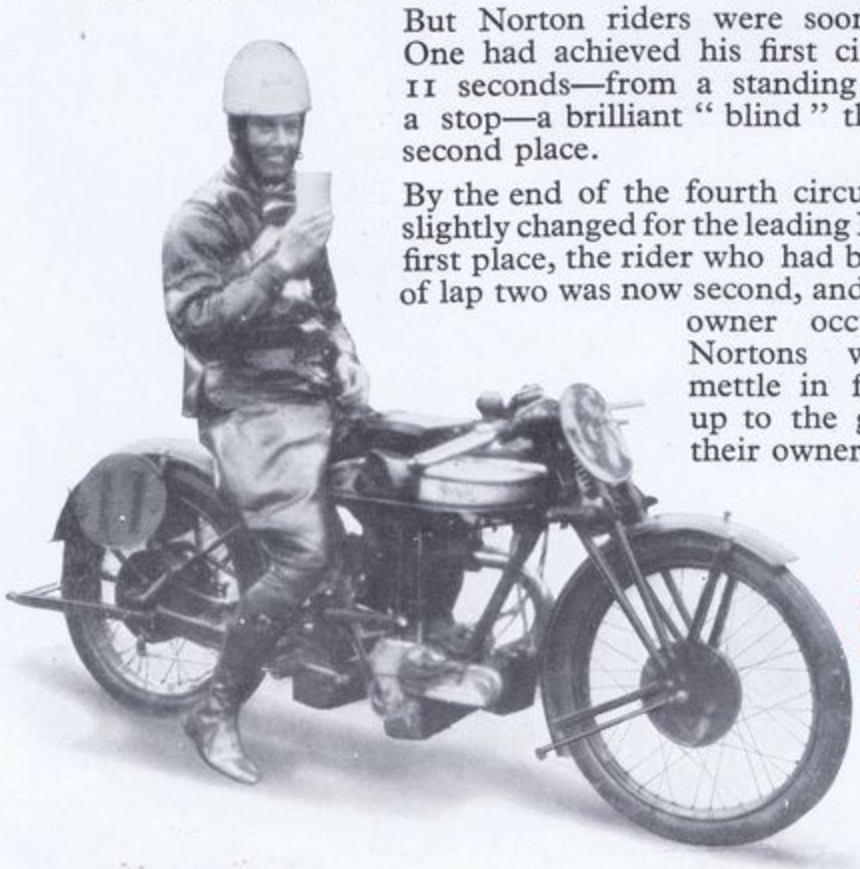
THE Fifth Amateur Motor Cycle Championship Road Race—better known as the Amateur T.T.—was run under just about the most depressing conditions that the most hardened motor cyclist could conceive. Let us hasten to add, however, that the "conditions" referred to were not those laid down by that most excellent and Sporting Body, the Manx Motor Cycle Club who, as in the past, shouldered the great responsibility of organising the event. No, it was a matter of weather —every kind of sport spoiling weather imaginable—rain, mist, fog, chilled air—and visibility about nil. Yet in spite of these discouraging conditions, a field of 69 riders faced the starter at 10 o'clock on Thursday, September 8th, 1927.

The Amateur T.T. is open only to Amateurs who have no association with the trade in any way, and who own the machines they ride—which must be standard models. So the Amateur T.T. is a race that *really* shows the private owner what machines can do in just such hands as his own. The race consists of six laps over the famous T.T. course in the Isle of Man—a distance of 226½ miles, embracing corners, hills, hairpins and hump-backed bridges.

Riders were despatched at 20 second intervals, and shortly after the last man was away, news of the approach of the first was to hand. Very soon retirements were announced in fast order, many riders having taken tosses on account of the treacherous road surface, and the terrific speed for which the first man away had set the pace.

But Norton riders were soon in the "picture." One had achieved his first circuit in 39 minutes, 11 seconds—from a standing start and including a stop—a brilliant "blind" that brought him into second place.

By the end of the fourth circuit positions had been slightly changed for the leading Nortonite had vacated first place, the rider who had been fourth at the end of lap two was now second, and still another Norton owner occupied third place. Nortons were showing their mettle in fine style, and living up to the greatest demands of their owners.



Mr. P. Hunt, winner of the Amateur T.T., taking refreshment after the race.

An idea of the weather conditions during the race can be gathered from this photograph taken immediately after the finish.

THEN came news of the Norton rider who had been first at lap two. It seems that near Greba he was " waved down " owing to a number of riders who had fallen here. He applied his brakes rather vigorously—and followed suit, causing damage to his machine which necessitated his retirement. Thus ended what had been up to this point a brilliant ride.

With the start of the sixth and last lap Norton owners were occupying second and third places, and only 22 seconds separated Norton from leadership. The race had developed into a magnificent duel between two riders . . . and one was on a Norton.

Then after a wait that seemed an eternity the race was over—a Norton rider, Mr. P. Hunt, had won in the magnificent time of 3 hrs. 55 mins. 55 secs.—an average of 58 m.p.h. Again, as in the Senior T.T. the winner's *last lap* was his fastest ! In addition to the Trophy, Mr. Hunt was awarded the Southport Cup for the best performance by a member of the Southport Club, and a Norton owner who finished fourth received the "best performance" cup of the Manx Motor Cycle Club.

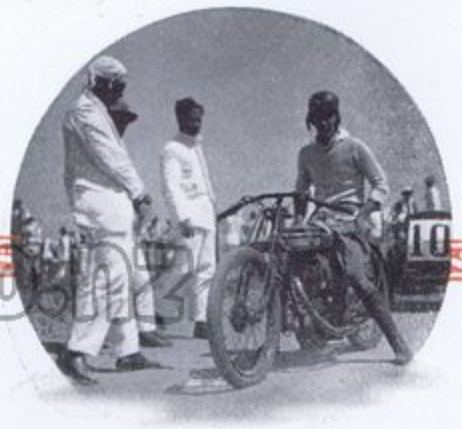
In conclusion may it be mentioned that out of only five Trophy replicas awarded to riders who finish within 10 per cent. more than the winner's time, three were won by Norton riders !

The SOUTH AFRICAN T.T.

THE fourth South African Senior Tourist Trophy Race, held on January 1st, 1927, at Port Elizabeth, was perhaps the most gruelling T.T. yet held in South Africa. The course was 200 miles in ten laps of 20 miles each. Most of the crack riders of the country took part, one of whom, Percy Flook, a well known rider and winner of the unlimited class T.T. race in 1926, rode a Norton 490 c.c. model. For the 1927 event, the unlimited class race was dropped, so that Nortons had no opportunity of pitting their strength against the great machines of nearly double their capacity as in the previous year.

Percy Flook rode a brilliant race over a course with numerous S bends, blind corners and very rough sections, yet in spite of this he won the race in 3 hours 10 minutes 29 seconds—only 18 seconds outside the record for the course—which incidentally was made by Flook and his Norton in the previous year's race.

Left: Percy Flook on the Norton with which he won the unlimited class Race in 1926 and (Right) after winning the Senior Race of 1927.



The DUTCH INTERNATIONAL T.T.

FOR the first time in the history of the race, the Dutch T.T. became an International race in 1927. In order, however, that national entries should still feel that it was their own particular race, a separate category for National riders was provided.

The race was held on the Drenthe Circuit near Assen on June 25th, 1927, over 16 laps, each of approximately 10¾ miles, and lay over a difficult and narrow course.

The Senior International Event was won by Stanley Woods on a Norton, at an average speed of 67.02 m.p.h.—a record speed, and five minutes in front of second man home.

The National event was won by Mr. A. P. van Hamersveld, also riding a 490 c.c. Norton. It is interesting to recall that the Dutch T.T. races of 1925 and 1926 were each won by Mr. P. van Wyngaarden on Nortons—so that Norton machines have won the event three years in succession.

Stanley Woods, fresh and happy after winning the Dutch International T.T., and, in oval, Mr. A. P. van Hamersveld, winner of the National event.

The BELGIAN GRAND PRIX

HELD on 17th July over 28 laps of the famous Spa Course, the race consisted of 258½ miles. This is a hilly and a tricky course, and calls for skill and experience, as well as a mightily sound machine.

Taking the lead from the start, Stanley Woods never once lost the position, and his lead became so great that he eased down considerably during the race, and each lap "coasted" past the Grand Stand. But just to break the monotony he put up a record lap at 76 m.p.h. and finally won the Senior (500 c.c. class) race by over 22 minutes from the next man home. In addition to the F.M.B. Gold Medal, Stanley Woods was awarded the "Perry" Cup for the fastest lap, and the "Terry" Cup for the most regular and consistent performance in any class. This former cup has been won by Norton three years in succession (twice by Stanley Woods), and now becomes Stanley's own property.

Norton's Belgian Grand Prix history is indeed a brilliant one—as the following record shows.

1921 First
1922 Second, third and fourth
1923 First
1924 First
1925 First
1926 Third
1927 First Again!

Above: Rounding one of the bends on the famous Spa course; below, Stanley Woods on his record lap. Right: Stanley Woods ready to start.

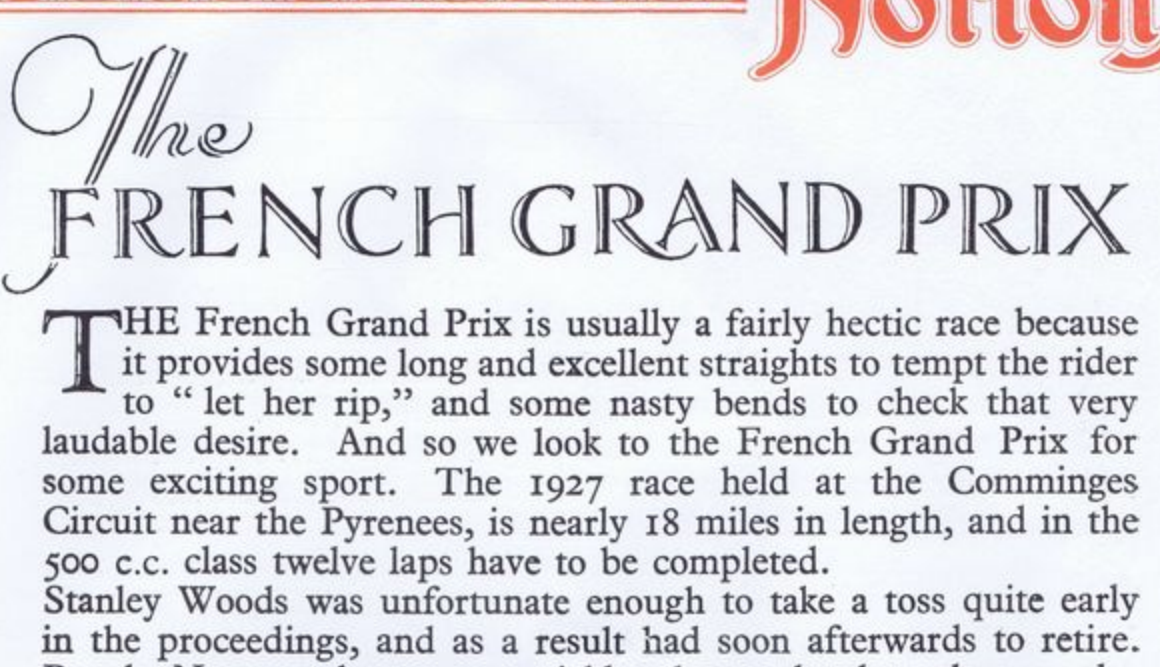
The FRENCH GRAND PRIX

THE French Grand Prix is usually a fairly hectic race because it provides some long and excellent straights to tempt the rider to " let her rip," and some nasty bends to check that very laudable desire. And so we look to the French Grand Prix for some exciting sport. The 1927 race held at the Comminges Circuit near the Pyrenees, is nearly 18 miles in length, and in the 500 c.c. class twelve laps have to be completed.

Stanley Woods was unfortunate enough to take a toss quite early in the proceedings, and as a result had soon afterwards to retire. But the Norton colours were quickly taken up by that other popular Irishman, Joe Craig, and his Norton, who won the event by nearly five minutes at an average speed of 66.29 m.p.h., thereby bringing the trophy once more to Britain, and giving intense satisfaction to that popular French Norton Agent, L. Psalty.

As in the Belgian race, Norton machines have in this race a " past." Here are details of previous French G.P. successes.

1924	Senior Race	1st	Alec Bennett	490	c.c.	Norton.
1925	„	„	2nd J. Craig	„	„	
1926	„	„	1st Alec Bennett	„	„	
1927	„	„	1st J. Craig	„	„	



Joe Craig overtaking another rider in the French Grand Prix, and, in small square, being congratulated upon his win.

The Unapproachable

Norton

The SWISS GRAND PRIX

THE Swiss Grand Prix of 1927 was the first in which an Official Norton rider had entered. The Senior Race for machines up to 500 c.c. was held on July 10th, over the Circuit de Meyrin, near Geneva—a course of the usual continental triangular type, and the distance was 248 miles.

This was another splendid victory for that wonderfully successful Norton rider, Stanley Woods. Beside putting up a record lap at 75.4 m.p.h.—a fine performance—Woods won the event at a record speed of 70.5 m.p.h. Once again the Norton proved its wonderful capacity on pastures new—and the favourable comments that followed this magnificent "first appearance victory," was very gratifying to Norton enthusiasts in Switzerland.

Above: Stanley Woods on his wonderful O.H. Camshaft Norton, and below, on one of the numerous bends approaching Geneva.

The ULSTER GRAND PRIX

"ANOTHER brilliant triumph for Norton," is how the Motor Cycle Press described the Ulster Grand Prix of 1927, held on September 3rd. And indeed no truer description could be given. The course is an exceptionally fast one, and on this occasion the weather was gloriously fine—so what could suit the Norton machine better?

From the very first it was obvious that the Norton boys were going to be right in the picture. Stanley Woods, Joe Craig and Jimmy Shaw shared first, second and third places during the first four circuits—all lapping at little under 80 m.p.h. Very quickly Craig and Woods each beat all previous lap records, and for several laps these two Nortonites stayed right in front—swopping places from time to time.

In the last lap Jimmy Shaw pulled into top place, and won at the brilliant record speed of 74.18 m.p.h., with Woods just missing second place by 10 1-5th seconds—and finishing only 52 seconds behind his brother Irishman, Shaw.

In the over 500 c.c. race, A. de Gourley, another Irishman riding a 588 c.c. Norton beat machines of nearly 1,000 c.c. and won this event. This was indeed a great day for Ireland and Norton.

The first Ulster Grand Prix was held in 1922. Below is Norton's record to date. Incidentally, Shaw's 1927 speed is a world's record speed for *any* road race.

In circle: Jimmy Shaw, the winner, on Clady Corner. Left: "The Camshaft Boys," Craig, Shaw and Woods, with de Gourley's 588 machine, on which he won the unlimited class race. Right: Woods on his record lap.

1922	...	600 c.c.	1st H. W. Hassall ...	490 c.c. Norton.
1923	...	600 c.c.	1st J. Craig	490 c.c. Norton.
1924	...	600 c.c.	1st J. Craig	490 c.c. Norton.
1925	...	600 c.c.	1st J. Craig	490 c.c. Norton.
1926	...	unlimited	1st J. Craig	490 c.c. Norton.
1927	...	500 c.c.	1st J. W. Shaw	490 c.c. Norton.
1927	...	unlimited	1st A. de Gourley ...	588 c.c. Norton.

The Unapproachable

Norton

Almost wonderfull achievement

100 MILES IN ONE HOUR

AT long last it has been achieved! For years Speedmen and Manufacturers have dreamed of creating a new record by covering one hundred miles in sixty minutes with a machine of 500 c.c. And while so many dreamed, A. Denly, holder of so many World's Records on Nortons, and the Norton people, "got down to it." The result? On June 28th, 1927, Denly, riding a push rod model No. 18 type 490 c.c. Norton machine at Montlhery Track near Paris, travelled 100.57 miles in sixty minutes, thereby being the first motor cycle of 500 c.c. or under to cover 100 miles in one hour, and setting up a world's record that up to the time of printing this booklet, has remained unchallenged. Denly has now held the hour record six times! A brilliant record for this big little rider, and an unapproachable achievement for Norton.

A photograph taken while A. Denly was actually travelling at over 100 m.p.h. at Montlhery.

Other Outstanding TRACK RECORDS

Sixty-five world's records in a single season! That is an achievement about which the most blasé could be proud—and that is what Norton has achieved under the excellent auspices of Mr. R. M. N. Spring, whose hobby and business it is to look after Norton interests at Brooklands. In every class in which there is a Norton of the right capacity to enter, Norton holds the world's hour record. Obviously it is impossible here to enumerate all these many successes, but it will no doubt be of interest to many if a few representative records are given in detail

MAY 9th. BROOKLANDS.

Mr. A. Denly, 588 c.c. Norton and Sidecar made the following World's Records.

CLASS F. (600 c.c. and Sidecar.)

1 Kilometre	91.30 m.p.h.
1 Mile	92.02 m.p.h.

(Top): The start of a race at Brooklands. A. Denly is the third from the foreground. (Bottom): A. Denly during a record breaking run at 109.22 m.p.h. at Brooklands.

MAY 14th. BROOKLANDS.

Mr A. Denly made the following World's Records on 5.88 c.c. Norton and Sidecar.
CLASS F. (600 c.c. and Sidecar.)

100 Kilos	82.84 m.p.h.	100 Miles	80.70 m.p.h.
1 Hour	82.86 m.p.h.	2 Hours	79.0 m.p.h.

MAY 20th. BROOKLANDS.

Mr. A. Denly and Mr. C. S. Staniland made 15 World's Records on 588 c.c. Norton and Sidecar, including 5, 6, 7, 8, 9, 10, 11 and 12 hours, 500 and 1,000 kilos, and 500 miles.

JUNE 28th. MONTLHERY TRACK, FRANCE.

Mr. A. Denly, on 490 c.c. Norton, broke the following World's Records. Classes "C" 500 c.c. and "D" 750 c.c.

1 Hour	100.57 miles	100 Miles	100.56 m.p.h.

AUGUST 26th. BROOKLANDS.

Mr. A. Denly and L. P. Driscoll, riding 588 c.c. Norton, alternately broke the following World's Records (held previously by the Italians) in Classes "D" 750 c.c. and "E" 1,000 c.c.

200 Miles ...	91.58 m.p.h.
500 Kilos ...	90.68 m.p.h.
3 Hours ...	91.23 m.p.h.
4 Hours ...	88.34 m.p.h.
5 Hours ...	86.18 m.p.h.

The Unapproachable

Norton

The MAUDE'S TROPHY— for four successive years

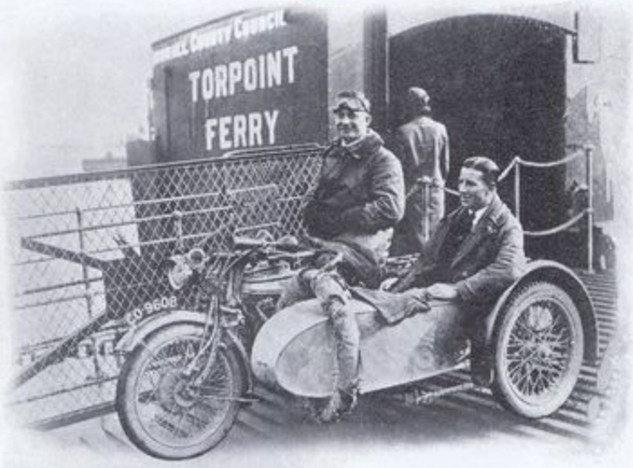
THE Maudes Trophy, introduced in 1923, is awarded to the manufacturer of the machine that, in the opinion of the Auto-Cycle Union, puts up the most meritorious performance of the year in an A.C.U. Observed Trial. With many of the leading manufacturers continually pitting their strength and experience against each other, and attempting the most difficult feats; it will be understood that the recipient of the Maudes Trophy must in every case do something very outstanding indeed. . . . And Norton has won it—four years in succession.

On September 13th, 1923, a Standard Norton O.H.V. engine was assembled under A.C.U. observation and without any tests whatever, taken to Brooklands Track and fitted to a standard frame. After "running in" over twenty-nine laps the machine started on a twelve hour test. During the twelve hours, nine world's records in classes C and D were broken. The Maudes Trophy was awarded for this performance.

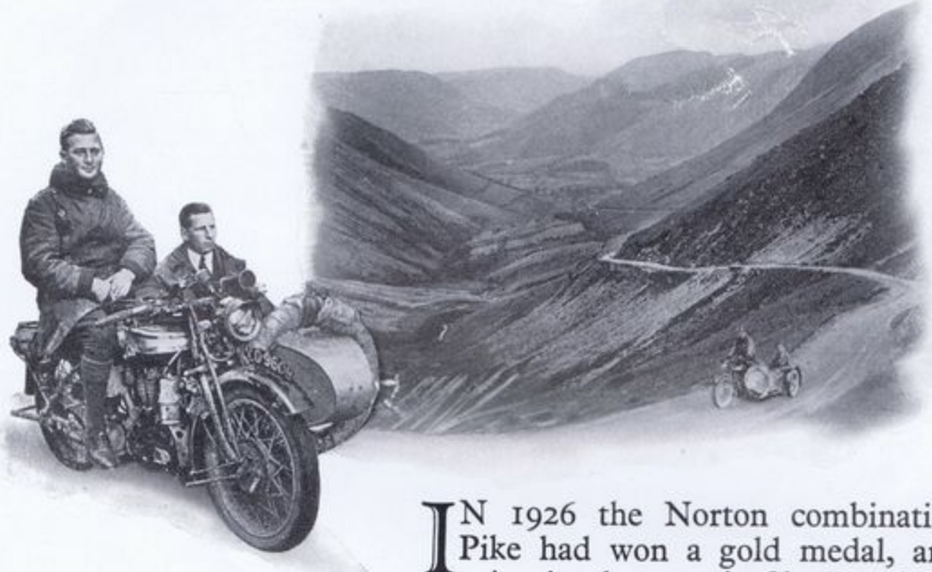
In September 1924, a Norton "Big Four" built from stock parts under A.C.U. observation, covered four end-to-end journeys between Land's End and John O'Groats. On the last trip a 14-seater char-a-banc crashed into the outfit, but the considerable damage was repaired from parts of a "Big Four" in a local agent's showrooms, and the trip completed. The outfit was then taken to Porlock Hill, where it made twenty non-stop ascents. The Maudes Trophy was awarded for this performance.

In 1925 two Norton machines, a solo and a combination were built as before, under A.C.U. observation and, still under the eagle eye of the A.C.U., covered all the famous trial courses—first the London-Exeter, next the London-Land's End, then the Land's End-John O'Groats, and finally the London-Edinburgh. After successfully conquering all these—each of which had during the season accounted for dozens of failures, both machines were taken to Brooklands, where they broke 32 world's records. For this performance Norton were awarded the Maudes Trophy.

The Maudes Trophy, won four years in succession by Norton.



(Top) : Crossing to Devonport en route for Plymouth at the conclusion of the wonderful test for which the Norton was awarded the Maudes Trophy for the 4th time in succession.



(Middle) : A photograph taken during the hundredth non-stop ascent of Bwlch-y-Groes, and on left, at the journey's end.

IN 1926 the Norton combination with which Phil Pike had won a gold medal, and shared the Team prize in that year's Six Days' Reliability Trial, was officially sealed by the A.C.U. Later it was taken without any adjustments to the famous Welsh Hill, Bwlch-y-Groes, where it made 100 non-stop ascents of the hill. After this, and still under A.C.U. observation, the outfit was driven from there to Edinburgh, back to Land's End and finally to Plymouth.

After each of the four tests mentioned the machines were dismantled and found to be in perfect condition. It has been impossible in so small a space to give adequate details of these strenuous tests, but the opening words of the previous page are sufficient to indicate that the Maudes Trophy is not lightly won ! Indeed, it is the most coveted, and therefore the most hard-to-win Trophy in the World of Reliability Trials for Motor Cycles . . . and Norton won it . . . *Four years in succession.*

The Unapproachable

Norton

RELIABILITY TRIALS

NORTON Successes in Reliability Trials during 1927 have been so numerous that a complete booklet could be written about them—and still be but a brief summary. But it will suffice in this instance to record that up to the time of going to press with this catalogue, Norton had gained during 1927 many hundreds of Cups and special Trophies, Gold medals, and Silver medals, in addition to many " best performances " in the classic events of the year. Here is a brief survey of the successes gained during the year—enough to show that not only in speed events, but in tests of reliability, Nortons are indeed Unapproachable.

DECEMBER 27th. LONDON—EXETER.
16 Gold Medals. 1 Silver Medal. 1 Bronze Medal.
18 Started. 18 Awards.

APRIL 15 and 16th. LONDON—LAND'S END TRIAL.
13 Gold Medals. 2 Silver Medals.
15 Started. 15 Awards.

APRIL 23rd. BATH AND DISTRICT'S M.C. 12-HOUR TRIAL.
Best Sidecar Performance.

MAY 1st. HUDDERSFIELD AND DISTRICT RELIABILITY TRIAL.
Premier Award Solo. Premier Award Sidecar.

MAY 11th. PLYMOUTH M.C.C. TRIAL.
Premier Award and Best Team Performance.

JUNE 3rd. LONDON—EDINBURGH RELIABILITY TRIAL.
5 Gold Medals. 6 Started.

JULY 2nd. NEWCASTLE M.C.C. TRIAL.
Best performance of any Motor Cycle.

JULY 16th. LONDON—COVENTRY—LONDON TRIAL.
Miss Ruby B. Slade gained a First Class Award, Silver Cup, and had the distinction of being the only lady rider to gain a silver cup.

JULY 25th to 30th. SCOTTISH SIX DAYS' TRIAL.
Silver Cup. Gold Medal. Silver Medal.

JULY 30th to AUGUST 1st. IRISH TWO DAYS' TRIAL.
Three 1st Class Awards and Gold Medals.

AUGUST 15th to 20th. INTERNATIONAL SIX DAYS' TRIAL.
3 Gold Medals.
Best Sidecar Performance. (The only sidecar without loss of marks).

AUGUST 27th. NORTH WALES CENTRE A.C.U. TRIAL.
Challenge Cup for best performance of the day and Cup for best 500 c.c.

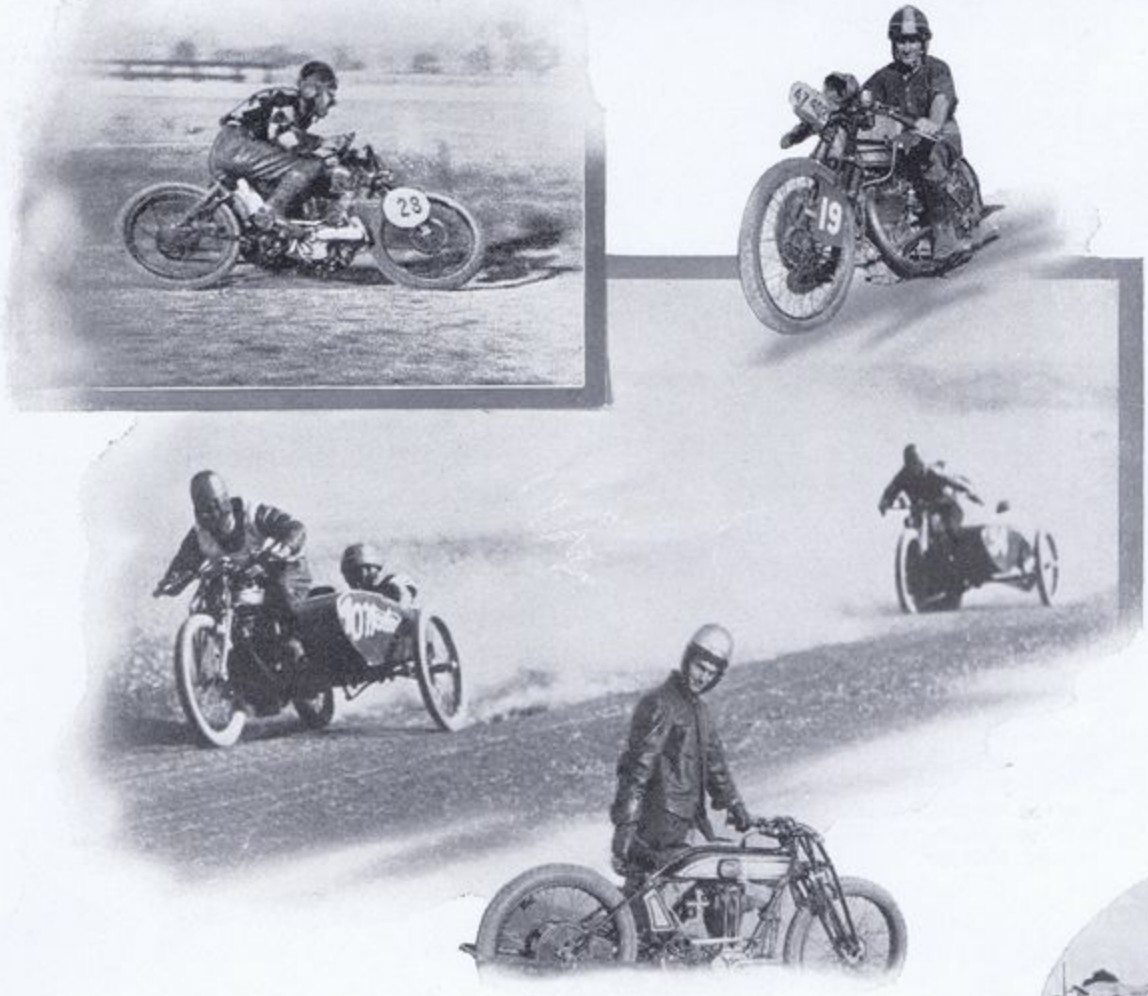
SEPTEMBER 3rd. MIDLAND CENTRE A.C.U. TRIAL.
Best Solo Performance.

Lack of space prevents us from recording details of the many hundreds of other important successes attained by Norton Riders in Reliability Trials during 1927.

Top left and right: Norton Riders in the International Six Days Trial of 1927. Centre: W. Milner (Norton) on Hepplewhite Scar, making fastest time of the day. Bottom left: Miss Ruby Slade, who has achieved many successes on her Norton combination during 1927. Bottom right: Phil Pike on his Norton combination ascending a hill in the "Six Days" in which he made the best performance of any sidecar.

A few COLONIAL SUCCESSES

SO numerous have been Norton successes in the Colonies that it would be almost invidious to attempt to list the best performances. There are so many achievements of equal merit that to deal fairly and comprehensively with each would require many more pages than are available in the whole of this booklet. Throughout the Colonies Nortons are giving the same brilliant service to their owners as they are in the country of their origin. In Australia—" up country " as well as in the large cities, there are thousands of Nortons in use, and very many interesting records of achievements are constantly being received. In South Africa and New Zealand too, the name Norton is constantly appearing in the records of successes in all the leading speed and reliability events. And the reason is not hard to understand. Nortons are built for dependable service under *any* conditions—they are not just designed to perform well under the comparatively good conditions prevailing in this country. The Norton is a true Cosmopolitan—at home in any country in the world.



A composite group of well-known Colonial riders representing Africa, New Zealand and Australia.

A few of the NORTON SUCCESSES IN FOREIGN COUNTRIES

AS in the case of Nortons Colonial successes, it would be impossible to record in this limited space a fair selection of achievements attained by riders of Nortons in Foreign countries. In the files at Norton Headquarters in Birmingham are records of successes in Brazil, Belgium, Sweden, Switzerland, Java, Germany, France, Holland, Japan—in fact in almost every civilised country in the world. Wherever Motor Cycles are known, there is the name and fame of Norton extolled. Wherever a racing track exists, there has Norton nailed its colours to the mast. And wherever Motor Cyclists are wont to gather together, there—be it backwoods or city—will be found Norton enthusiasts, for such is the reputation of the Unapproachable Norton.

Above: The start of a "Nortons Only" race at Montlhery. In foreground: Mr. Van der Vlugt, winner of Amateur Championship Trial in Holland. Left: Two well-known Dutch riders.

A brief summary of OTHER SUCCESSES

MR. E. SEARLE

MR. E. SEARLE has during the 1927 season achieved 106 firsts, 14 fastest times of the day and 20 cups and trophies. On six occasions he has put up new records for courses, and on sands at Southport on September 17th, he made fastest time of the day, reaching a speed of 100.72 m.p.h. over the Kilometer solo and 84.5 m.p.h. sidecar.

MR. L. SLATER

MR. L. SLATER commenced riding four years ago, and has ridden Norton machines exclusively in speed events. His 1927 record includes over 30 firsts in various important races.

MR. PHIL PIKE is a famous " reliability " rider who revels in arduous tests and trials. During 1927 he has with Norton won gold medals in the London-Exeter, the London-Land's End, the London-Edinburgh Reliability Trials, and as everyone knows, achieved a signal success in the International Six Days Trial.

MR. H. F. BROCKBANK is still riding his 1924 4.90 h.p. Norton with which he has had so many past successes. During 1927 with this machine, he made 34 firsts, 12 seconds and 6 thirds, consistently beating machines of 600 and 1,000 c.c.

MR. C. S. STANILAND is a well-known Brooklands rider who has many times broken world's records with Norton machines. He won the (600 c.c. Sidecar Class) British Motor Cycle Grand Prix, making the fastest sidecar time of the day.

MR. P. PIKE

MR. JIMMY SHAW is a very popular Irish Norton rider, and in addition to his successes mentioned in earlier pages of this booklet, during 1927 was first, made fastest time and record for the Red Brae Hill Climb, first, Magilligan 50 miles race, made fastest time and fastest lap in the Dungannon 100 miles road race.

MR. H. F. BROCKBANK

MR. C. S. STANILAND

MR. J. W. SHAW

And a few famous NORTON RIDERS

MR. DENE ALLEN, another Irish " Nortonite," is a well-known rider, and is generally understood in his own country to be Champion of the Sidecar Classes. Most of his successes have been attained with a Norton Combination.

MR. DENE ALLEN

MR. MAGNUS NYSTROM is a popular Swedish rider who, during 1927 has captured 14 firsts, 4 fastest times of the day, 2 highest awards in trials, and in the B.M.K. trial was the only rider who did not lose a mark. He is Swedish champion in Class C. and holds the record for the flying kilometer in his country.

MR. MAGNUS NYSTROM

MR. PER NYSTROM, brother of Magnus Nystrom has 12 firsts in Hill Climbs and trials to his credit with solo and sidecar machines. Also he has made 6 fastest times, and has made 7 new records for hills and courses, beside winning a gold medal in the Swedish May Trials.

MR. H. A. HARBEN is a Norton rider who likes pitting his strength against great odds. He has won during 1927 10 firsts and 15 seconds, many of which were in the 1,000 c.c. and unlimited classes.

MR. PER NYSTROM

MR. A. C. SAVILE during 1927 has won 16 firsts, 9 seconds, and put up the fastest time of the day at the Open Meeting at Saltburn, for which he received a Silver Cup.

MR. J. W. MARSHALL has won 4 firsts and made 2 fastest times of the day in University Trials, and has added 3 first and 1 second in open speed events, in one of which, at Brooklands, he attained a lap speed of 94.5 m.p.h. Mr. Marshall gained an award or a " place " in every event entered during 1927.

MR. J. W. MARSHALL

MR. A. C. SAVILE

MR. H. A. HARBEN

MR. H. MATTHEWS

MR. H. MATTHEWS, during 1927 captured 23 firsts and 16 seconds at open speed trials with solo and sidecar Nortons. At the Northern Centre A.C.U. Open Speed Trials at Barrow on April 18th, he won the " Tyke " Trophy and Cup for the best sidecar performance of the meeting.

MR. J. H. GARDINER

MR. H. JACKSON won the 50 mile championship at the F.M.S.C. Speed Trials, Walney Sands, on July 10th, and has, in addition, gained 24 firsts and 15 seconds with his Norton during 1927.

MR. H. JACKSON

MR. L. V. THOMAS, at the Swansea and District Sand Races at Oxwich Bay on April 18th, was first in the 25 mile (500 c.c.) the 50 mile (500 c.c.), the 25 mile (unlimited), and the 10 mile sidecar race. He has many other successes to his credit.

MR. A. de GOURLEY

MR. C. McCLEAN during 1927, was first in the open 50 mile Championship of Ireland (500 c.c. class), the open 50 mile championship of Ulster (500 c.c. class), and the open 50 and open 10 miles handicaps at Magilligan Strand, riding a 3½ h.p. Norton.

MR. L. V. THOMAS

MR. J. H. GARDINER is a consistent and successful Norton Rider with numerous successes in open speed events and trials to his credit during 1927, including the 50 miles solo race at Southport Sands on May 9th, when he took first place in the 500 c.c. and unlimited classes.

MR. J. C. ALLEN

MR. A. DE GOURLEY is a popular Irish Norton rider. He won the unlimited class race in the Ulster Grand Prix, and has achieved other successes.

MR. C. McCLEAN

MR. J. C. ALLEN has won 15 firsts and 5 seconds during 1927, and at Bellshill open speed event on April 30th, put up the fastest time of the day.

Lack of space prevents the recording of many more equally interesting achievements of Norton owners. All over the country and in fact all over the world, Norton owners are regularly capturing premier awards in every kind of trial and race, and it is therefore quite impossible to deal adequately with them.

The Unapproachable **Norton**

GUARANTEE

No Exchange or Replacement whatever will be considered until Parts have been presented to us for Examination—Carriage Paid.

WE give the following guarantee with our motor cycles, motor cycle combinations and sidecars, which is given in place of any implied conditions, warranties or liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded. No statement or representation contained in our catalogue, or in any advertisement, leaflet or other publication, shall be construed as enlarging or varying or over-riding this guarantee. In the case of machines which have been used for "hiring out" purposes, or from which our trade mark, our name or manufacturing number has been removed, no guarantee of any kind is given or is to be implied.

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 three months only from date of purchase, and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part manufactured by us in exchange for the part of the motor cycle which may have proved defective. We do not undertake to replace or refix, or bear the cost of replacing or refixing, such new part in the motor cycle We undertake, subject to the conditions mentioned below, to make good at any time within three months any defects in these respects. As motor cycles 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 the 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.

In respect of repairs and replacements of our own manufacture, whether the repairs are required for the purpose of making good the defect before referred to, or otherwise, we give the following guarantee:

We guarantee, subject to the conditions 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 three months only from the time such work shall have been executed; this guarantee being given in lieu of any implied conditions, warranties or liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded, 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 GUARANTEE.

If a defective part should be found in our motor cycles, it must be sent to us carriage paid, and accompanied by an intimation from the sender that he desires to have it repaired free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the name of the dealer from whom he purchased, and the date of purchase.

Failing compliance with the above, no notice will be taken of anything which may arrive, but such articles will lie here at the risk of the sender; and this guarantee and any implied guarantee, shall not be enforcable. We do not guarantee specialities of other firms or any component parts supplied to the order of the customer differing from our standard specification.

We do not appoint agents for the sale of our motor cycles or other goods. We assign to motor cycle dealers (styled "regional" dealers), who carry on business on their own account areas in which they have the exclusive or other right to sell goods purchased from us. A regional dealer purchasing from us, or a sub-dealer purchasing from him, may, on our behalf (as our agent for this purpose only), give the guarantee printed above.

Any such dealer is not authorised to advertise, incur any debts, or transact any business whatsoever on our account, nor is he authorised so as to bind us, to give any warranty or make any representation on our behalf, or to sell subject to or with any conditions other than these contained in such guarantee.

We guarantee only those machines which are bought either direct from us or from a regional dealer or sub-dealer, and under no other conditions.

NORTON MOTORS (1926) LTD.
Bracebridge Street - Birmingham.

'Phone (Private Branch Exchange) Central 2351 and 2352.
Telegraphic Address: "Nortomo, Birmingham.

The Unapproachable Norton

ACKNOWLEDGMENT

WE wish to take this opportunity of thanking the following for the help they have rendered to us and to our Advertising Consultants, Messrs. V. Siviter Smith & Company, Limited, in the preparation of this booklet. Without the many permissions to reproduce photographs, the approval of governing bodies and the willing co-operation of riders, sports clubs, and many more too numerous to mention, this very full record of Norton Achievements could not have been contemplated. To all, then, our thanks.

"The Motor Cycle"	London.
F. R. Logan	Birmingham.
"The Daily Mirror"	London.
"Motor Cycling"	London.
News Illustrated Press Agency ..	London.
Barratt's Photo Press	London.
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NORTON MOTORS (1926) LTD.,
BIRMINGHAM.

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"Lucas" Magdyno, with 6 volt 12 ampere hour capacity accumulator, Head Lamp with ammeter incorporated and Tail Lamp complete ... ...
" " " Combination set ... ...
"Lucas" Electric Horn, suitable for above ... ...
"Lucas" No. 63 Bulb Horn ... ...
"M-L" Maglita set—Solo ... ...
" " Combination ... ...
'Norton" Celluloid Windscreen, suitable for Model G, Model H or Model J Sidecars ... ...
"Easting" Windscreen with standard fittings ... ...
"Easting" Windscreen with "Royal" fittings ... ...
"Easting" Baby Screen ... ...
"Easting" Eclipse Screen ... ...
Legshields ... ...
O.S. Speedometer—Trip ... ...
" " Non-Trip ... ...
(Black or Nickel Plated finish, calibrated to 80 or 100 miles per hour)
Bonniksen Trip Speedometer ... ...
" Non-Trip Speedometer ... ...
(Rear wheel drive 10/- extra)

The UNAPPROACHABLE