

THE UNAPPROACHABLE

Norton

The World's Best Road-Holder

THE UNAPPROACHABLE

Norton

MODELS FOR 1948

Modifications for 1948

The 1948 Norton programme is introduced with complete confidence to a discerning motor cycling public. The range of machines incorporates all the best features of modern practice. A wealth of knowledge gained from years of unsurpassed road racing and trials successes, ensures the unequalled performance, reliability and unfailing service of every model in the range.

"Unapproachable" is something more than a mere trade mark.

THE ENGINE of the **MODEL 18** and **E.S.2** machines, i.e., the 500 c.c. push rod models, has been modified, particular attention having been paid to the layout of the timing gear and overhead valve mechanism. The cam followers previously fitted have been dispensed with and replaced by directly operating tappets. Entirely new timing gears of advanced design are employed, both cam wheels meshing with the half-time pinion. Mechanical noise has been reduced to a minimum. The overhead valve mechanism has been redesigned, a new one-piece rocker box is employed, the rockers being mounted on fixed spindles and pressure lubricated by a direct feed. A new type piston of low expansion aluminium alloy, having a longer skirt, is fitted.

MODEL 16H. The 490 c.c. side valve engine of this model has been redesigned, the timing gear having been modified in the same way as the Model 18. The valves and springs are fully enclosed in a separate aluminium alloy one-piece chamber. The cylinder head is of advanced design in aluminium heat-treated alloy with a very efficient combustion chamber. A 14 m.m. plug is fitted.

MODEL No. 1 "BIG FOUR." The engine of this model has been redesigned, the bore and stroke is now 82 m.m. x 113 m.m. giving a cubic capacity of 596 c.c. The engine design and general specification is similar to the Model 16H.

THE WORLD'S BEST ROAD - HOLDER



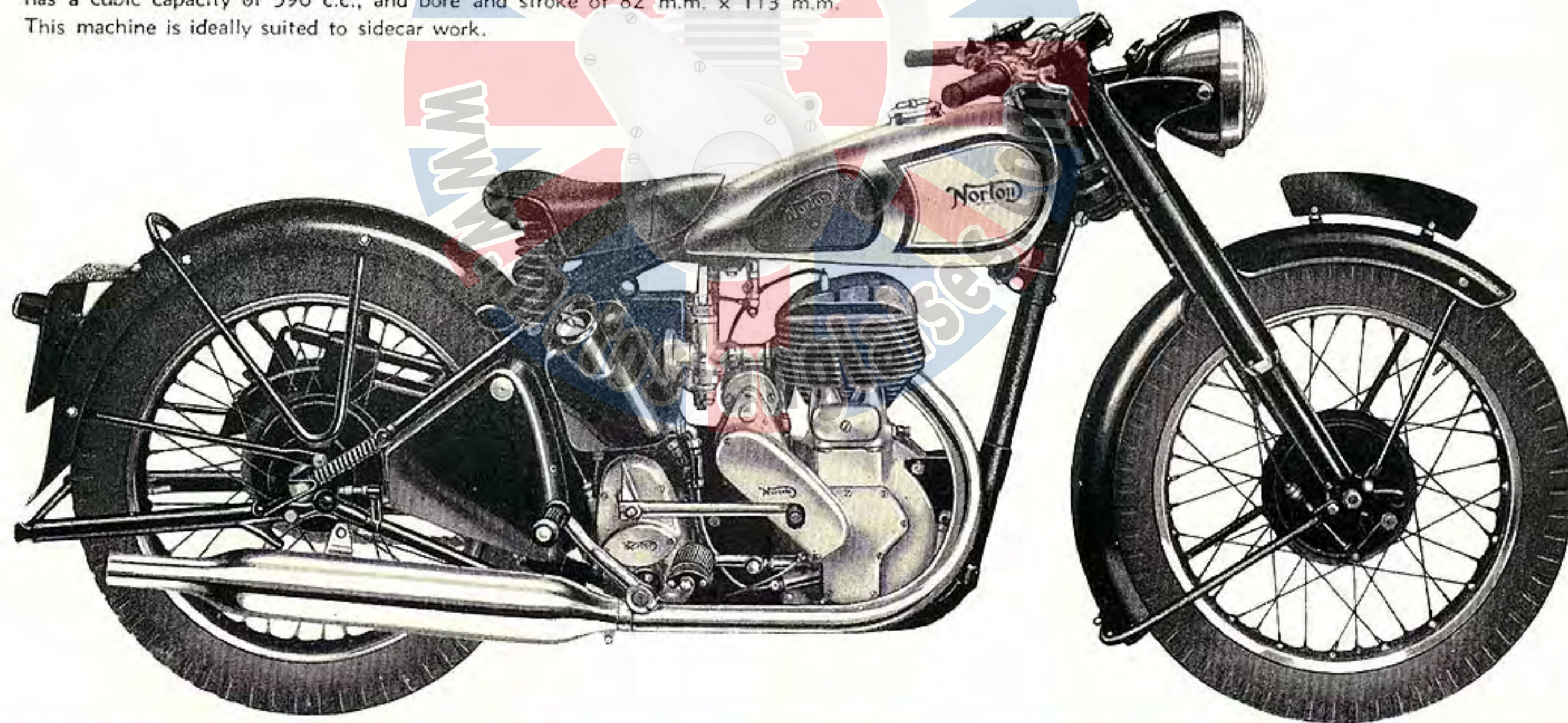
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THE WORLD'S BEST ROAD-HOLDER

THE NORTON 16H ENGINE is world renowned for reliability. It is built throughout of the finest materials available, and its universal success is proof of the soundness of design. The cubic capacity of the engine, which is side valve operated, is 490 c.c., and the bore and stroke 79 x 100 m.m.

MODEL No. 1. "BIG FOUR" is to similar specification as the Model 16H, but has a cubic capacity of 596 c.c., and bore and stroke of 82 m.m. x 113 m.m. This machine is ideally suited to sidecar work.



NORTON STILL HOLDS THE T.T. LAP RECORD AT 91 M.P.H.

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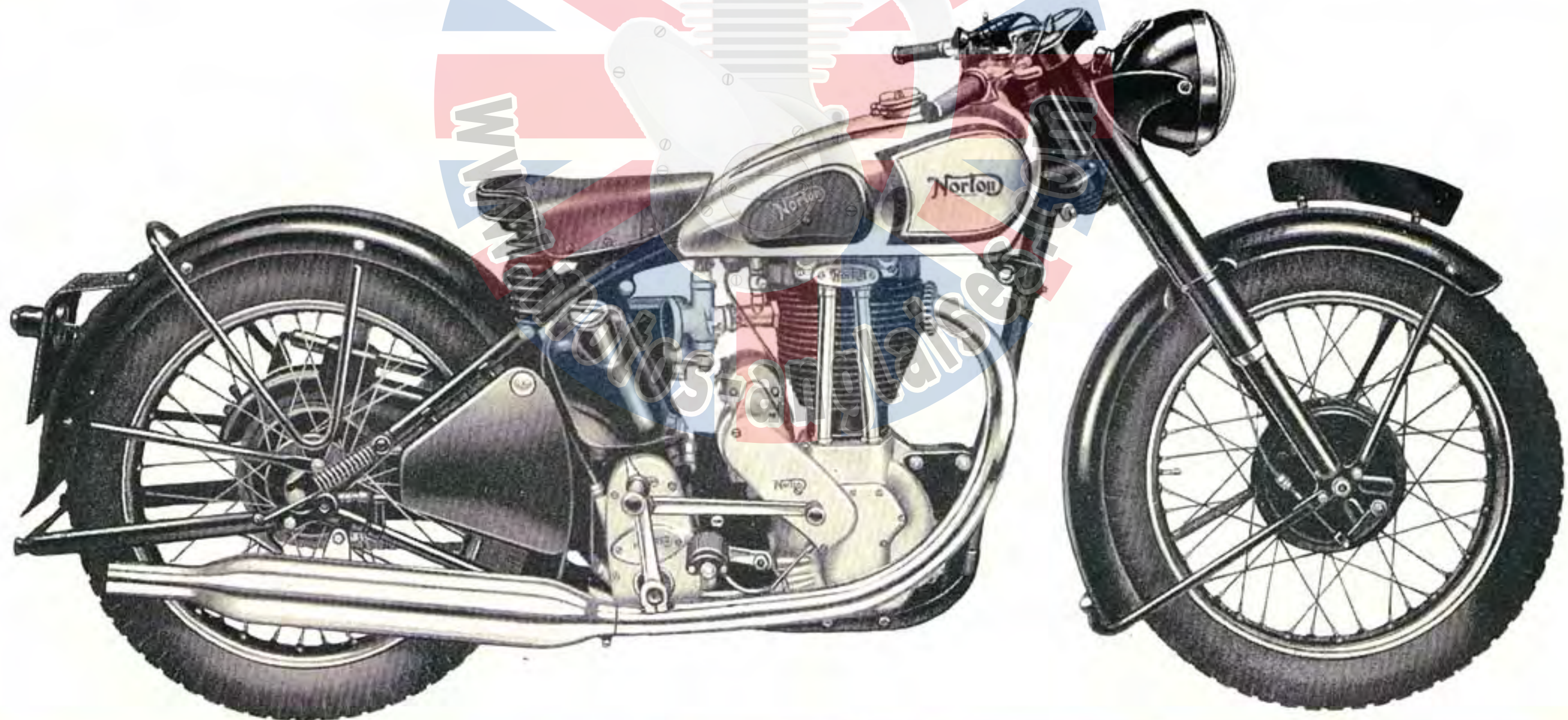
MODEL

13

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THE WORLD'S BEST ROAD-HOLDER

THE MODEL 18 ENGINE employs overhead valves, push rod operated; the whole of the valve gear is totally enclosed and automatically lubricated. Positive lubrication, large bearing surfaces and ground timing gear teeth ensure silent operation. The engine has a bore and stroke of 79 m.m. x 100 m.m. and a cubic capacity of 490 c.c.



THE WORLD'S BEST ROAD - HOLDER

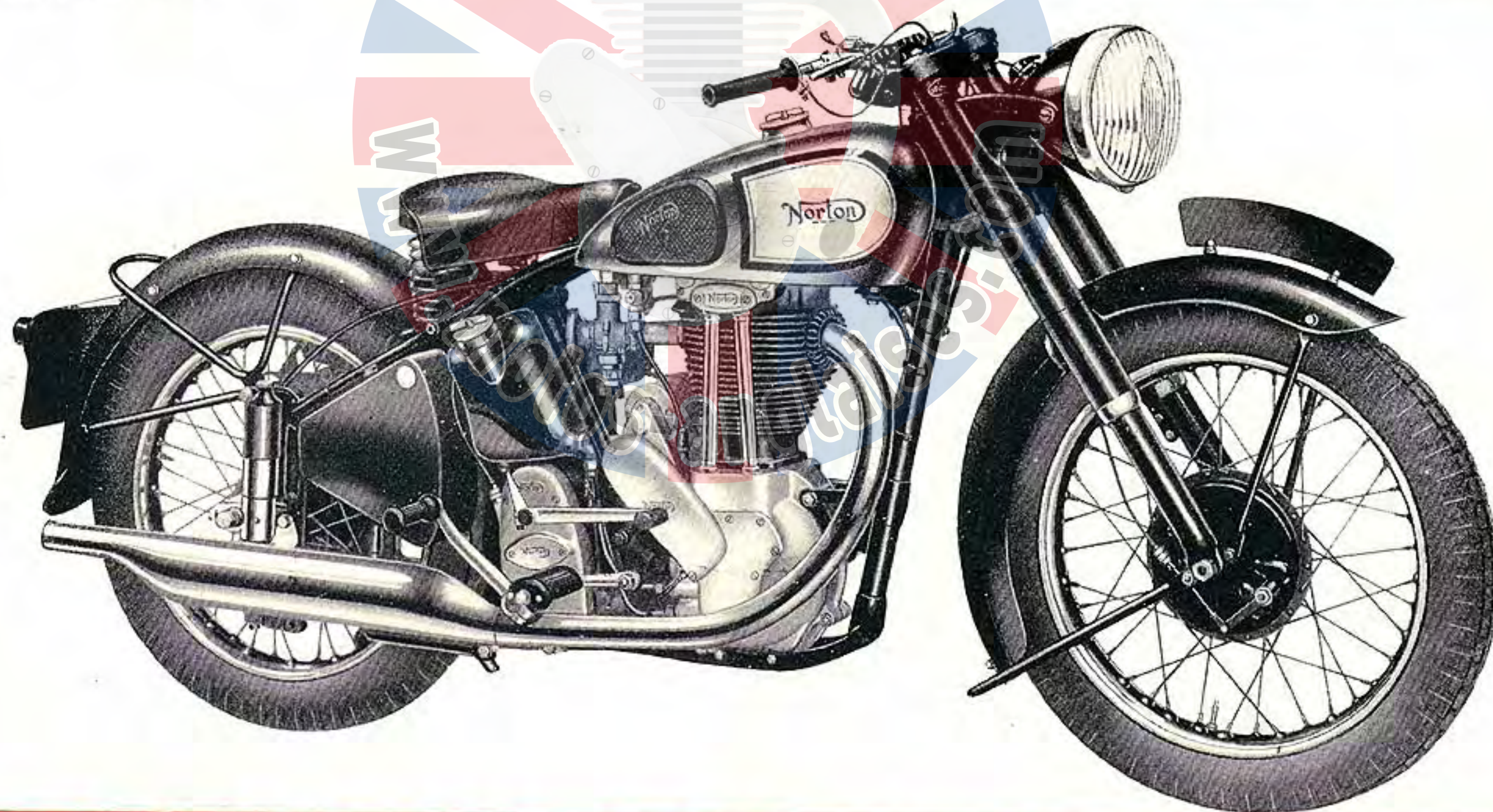


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THE WORLD'S BEST ROAD-HOLDER

THE MODEL E.S.2 machine is to the same specification as the Model 18, with the exception that it is fitted with the NORTON Spring Frame.



NORTON STILL HOLDS THE T.T. LAP RECORD AT 91 M.P.H.

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Winner of 20 T.T.'s



A. J. Bell immediately after riding into second place in the 1947 Senior T.T. H. L. Daniell riding a Norton Machine was first.



H. L. Daniell (No. 72) and A. J. Bell (No. 41) immediately after winning First and Second place respectively in the 1947 Senior T.T.



H. L. Daniell being congratulated by his team mate, A. J. Bell, immediately after winning the 1947 Senior T.T. on a Norton Machine. A. J. Bell was second on a Norton only 22 seconds behind the winner.

1947 SUCCESSES

Twenty times a T.T. winner! This is a record unsurpassed by any other machine in T.T. history. These 1947 successes prove that the unapproachable Nortons still set a standard worthy of their great heritage.

ISLE OF MAN SENIOR T.T.

FIRST ...	H. L. Daniell ...	NORTON ...	82.81 m.p.h.
SECOND ...	A. J. Bell ...	NORTON ...	82.66 m.p.h.
FOURTH ...	E. J. Frend ...	NORTON ...	81.57 m.p.h.

BELGIAN GRAND PRIX.

JUNIOR. FIRST ...	K. Bills ...	NORTON ...	85.22 m.p.h.
		and fastest lap at	86.03 m.p.h.
SENIOR. FIRST ...	H. L. Daniell ...	NORTON ...	89.35 m.p.h.
SECOND ...	A. J. Bell ...	NORTON ...	89.31 m.p.h.
THIRD ...	K. Bills ...	NORTON ...	89.28 m.p.h.
		and fastest lap at	91.21 m.p.h.

SIDECAR CLASS. FIRST and SECOND ... NORTON.

DUTCH T.T.

SENIOR. FIRST ...	A. J. Bell ...	NORTON ...	83.95 m.p.h.
Fastest lap, H. L. Daniell ...	NORTON ...		86.90 m.p.h.

ULSTER GRAND PRIX.

The World's Fastest Road Race.

SENIOR. FIRST ...	A. J. Bell ...	NORTON ...	91.25 m.p.h.
SECOND ...	E. Lyons ...	NORTON ...	91.10 m.p.h.
JUNIOR. FIRST ...	J. Lockett ...	NORTON ...	84.77 m.p.h.

BRAZIL.

Sao Paulo Championship Race.

FIRST ...	Felipe Carmona ...	NORTON and fastest lap.
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HUNGARY.

Hungarian Grand Prix.

SIDECAR CLASS. FIRST ...	Josze Bauer ...	NORTON and fastest lap
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FRANCE.

Bol d'Or 24 hours' Race.

FIRST ...	Gustave Lefevre ...	NORTON
Winner covered 1,286 miles in 24 hours.		



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THE WORLD'S BEST ROAD-HOLDER

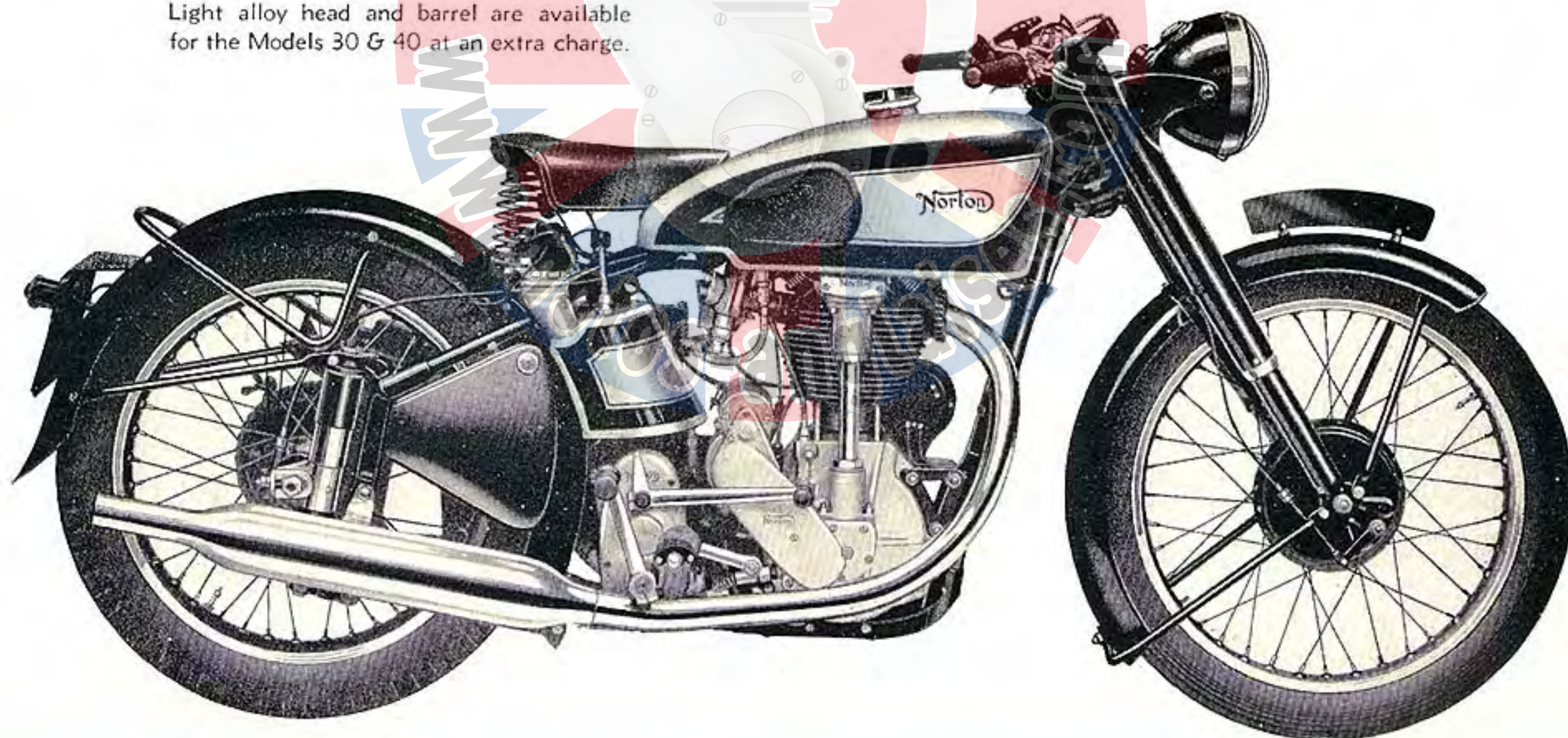
MODEL

30 & 40
INTERNATIONAL

THE MODEL 30 is fitted with spring frame as standard specification. This model employs the world's renowned NORTON overhead cam shaft engine. The universal success obtained with this particular type of engine is an indication of the soundness of design. The bore and stroke is 79 m.m. x 100 m.m. and the cubic capacity 490 c.c.

MODEL 40. This machine is to the same specification as the Model 30, with the exception that the engine capacity is 348 c.c. and bore and stroke 71 m.m. x 88 m.m.

Light alloy head and barrel are available for the Models 30 & 40 at an extra charge.



THE WORLD'S BEST ROAD - HOLDER



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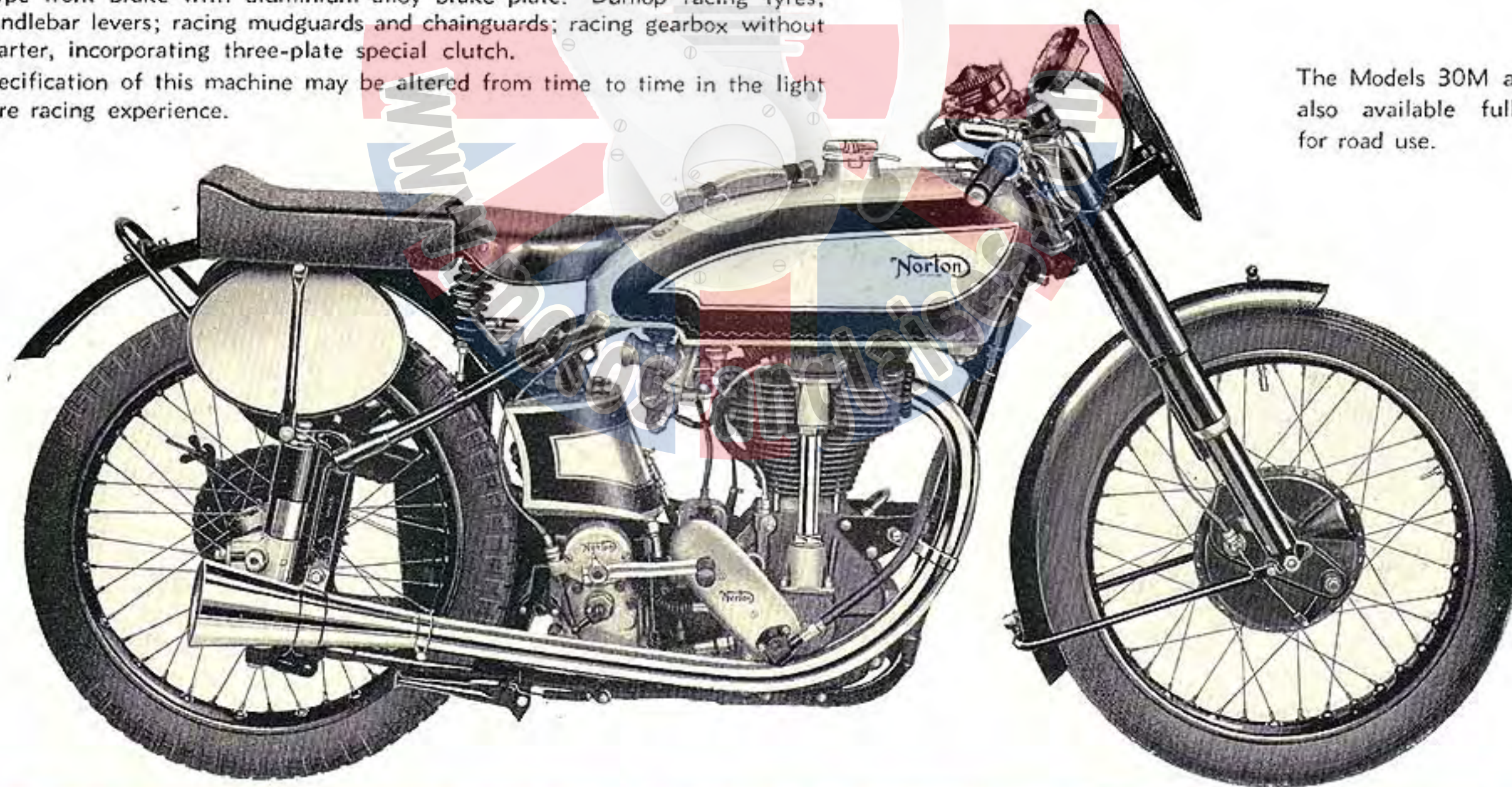
THE WORLD'S BEST ROAD-HOLDER

Just

MANX 30 and 40. This is a machine specially designed for racing. Every detail of the specification is of the utmost importance and includes the following: **ENGINE.**—Every engine is specially built and tuned. Aluminium alloy head and barrel are fitted as standard; light alloy crankcase; B.T.H. racing magneto with T.T. remote control carburetter. The well-known NORTON Spring Frame is employed with Telescopic Forks—Patent No. 557982; petrol tank capacity 4½ gallons approx.; Quick-lift filler caps; straight through exhaust with megaphone; cone type front brake with aluminium alloy brake plate. Dunlop racing tyres; long handlebar levers; racing mudguards and chainguards; racing gearbox without kick starter, incorporating three-plate special clutch.

The specification of this machine may be altered from time to time in the light of future racing experience.

The Models 30M and 40M are also available fully equipped for road use.



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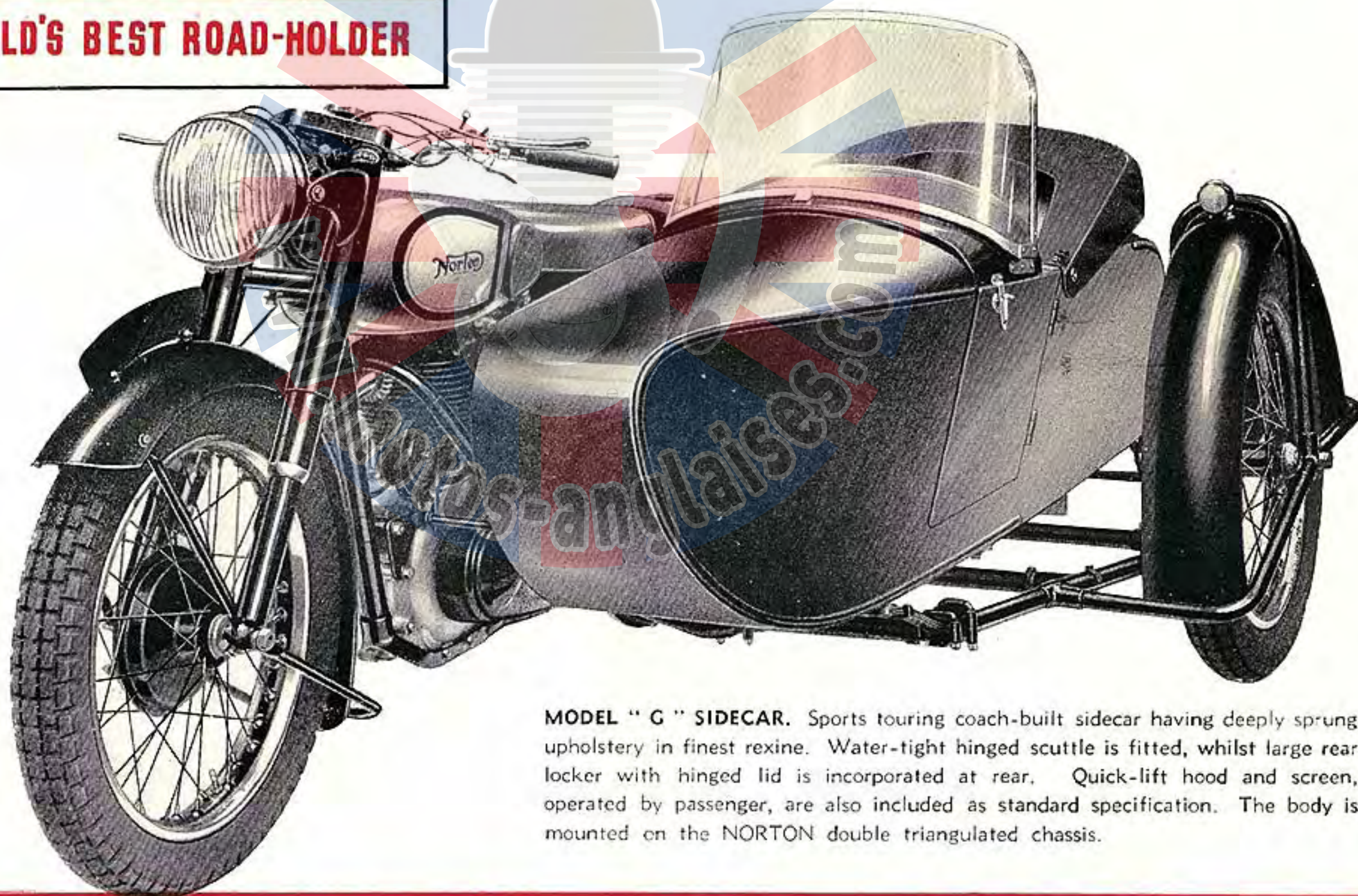
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THE WORLD'S BEST ROAD-HOLDER

MODEL



SIDECAR



MODEL " G " SIDECAR. Sports touring coach-built sidecar having deeply sprung upholstery in finest rexine. Water-tight hinged scuttle is fitted, whilst large rear locker with hinged lid is incorporated at rear. Quick-lift hood and screen, operated by passenger, are also included as standard specification. The body is mounted on the NORTON double triangulated chassis.

THE WORLD'S BEST ROAD - HOLDER

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THE WORLD'S BEST ROAD-HOLDER

General Specification

Subject to alteration without previous notice.

FRAME. Of immensely rigid cradle construction, built with high tensile steel tube and graduated section lugs. Spring frame is fitted as standard specification to the Model E.S.2 and all International machines.

FORKS. The plunger type of fork, Provisional Patent No. 557982, is fitted to all 1948 Model Norton machines as standard specification. This fork has been proved in the most strenuous International road races over a considerable period.

WHEELS. The rims are heavily chromium plated, with enamelled centres and suitably lined. Journal bearings of large dimensions are employed.

PETROL TANK. Heavily chromium plated with suitably enamelled panels and large resilient knee grips.

OIL TANK. New type, of improved lines, finished black enamel. Capacity, approximately 4 pints.

SADDLE. Flexible top, forward pivotal mounting, giving low and exceptionally comfortable riding position.

FRONT CHAINCASE. Norton Chaincase Patent No. 406599, of unique design with single bolt fixing, hermetically sealed.

CLUTCH. Multi-plate with special Ferodo inserts. Dual action vane type shock absorber incorporated.

GEARBOX. NORTON four-speed with built-in positive foot operation, Patent No. 424154, with clutch operating mechanism completely enclosed.

STAND. Central prop stand is fitted to all models.

SILENCER. This effectively reduces the exhaust noise. It is pleasing in appearance and has been modified internally, giving a greater degree of silence without loss of power.

HANDLEBAR. Adjustable both for height and rake.

ENGINE LUBRICATION. Full dry sump with gear pump, pressure feed to bearings and piston. Automatic and efficient lubrication of totally enclosed O.H.V. and S.V. gear with oil cushion in timing gears and sludge trap in crankcase.

MAGDYNO. Lucas Magdyno electric lighting is fitted as standard to all machines except International models to racing specification. Lucas electric horn is also included in the standard equipment.

CARBURETTER. AMAL needle jet, semi-automatic with twist grip control.

PILLION FOOTREST LUGS. Built into every frame for attachment of NORTON pillion footrests.

MUDGUARDS. Heavy car type affording excellent protection. Detachable flared tail piece to rear guard. Narrow sporting mudguards fitted to Racing International models.

NORTON STILL HOLDS THE T.T. LAP RECORD AT 91 M.P.H.

COPY OF GUARANTEE GIVEN BY NORTON MOTORS LTD. TO THEIR DEALERS.

WE do not appoint agents for the sale on our behalf of our motor cycles, but we assign to motor cycle dealers distributing rights. No such dealer is authorised to transact any business, give any warranty or 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, including all accessories and component parts other than tyres, saddles, chains and lighting and electrical equipment and other accessories and component parts supplied to the order of the purchaser and differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations and sidecars, but including accessories and parts supplied by way of exchange as hereinafter provided. 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 over-riding 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 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 repair of or supply of a new part or accessory in exchange for the part of the motor cycle, motor cycle combination or sidecar or accessory which may have proved defective. We undertake, subject to the conditions mentioned below, to make good in manner aforesaid any part or accessory 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 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 and electrical equipment, or any accessories or component parts supplied to the order of the purchaser differing from those comprised in the standard specifications supplied with our motor cycles, motor cycle combinations or sidecars. As regards all such tyres, saddles, chains, lighting and electrical equipment, accessories and component parts, 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 should be found in our motor cycles, motor cycle combinations or sidecars, or in any part or accessory supplied by way of exchange as before provided, it must be sent to us carriage paid, and 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 also furnish us at the same time with the number of the machine, the date of the 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.

No exchange or replacement whatever will be considered until parts have been presented to us for examination—carriage paid.

PRICES ARE SUBJECT TO ALTERATION WITHOUT NOTICE.

Prices and specifications subject to alteration without previous notice.

NORTON MOTORS LTD., BRACEBRIDGE STREET, BIRMINGHAM, 6, ENGLAND

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