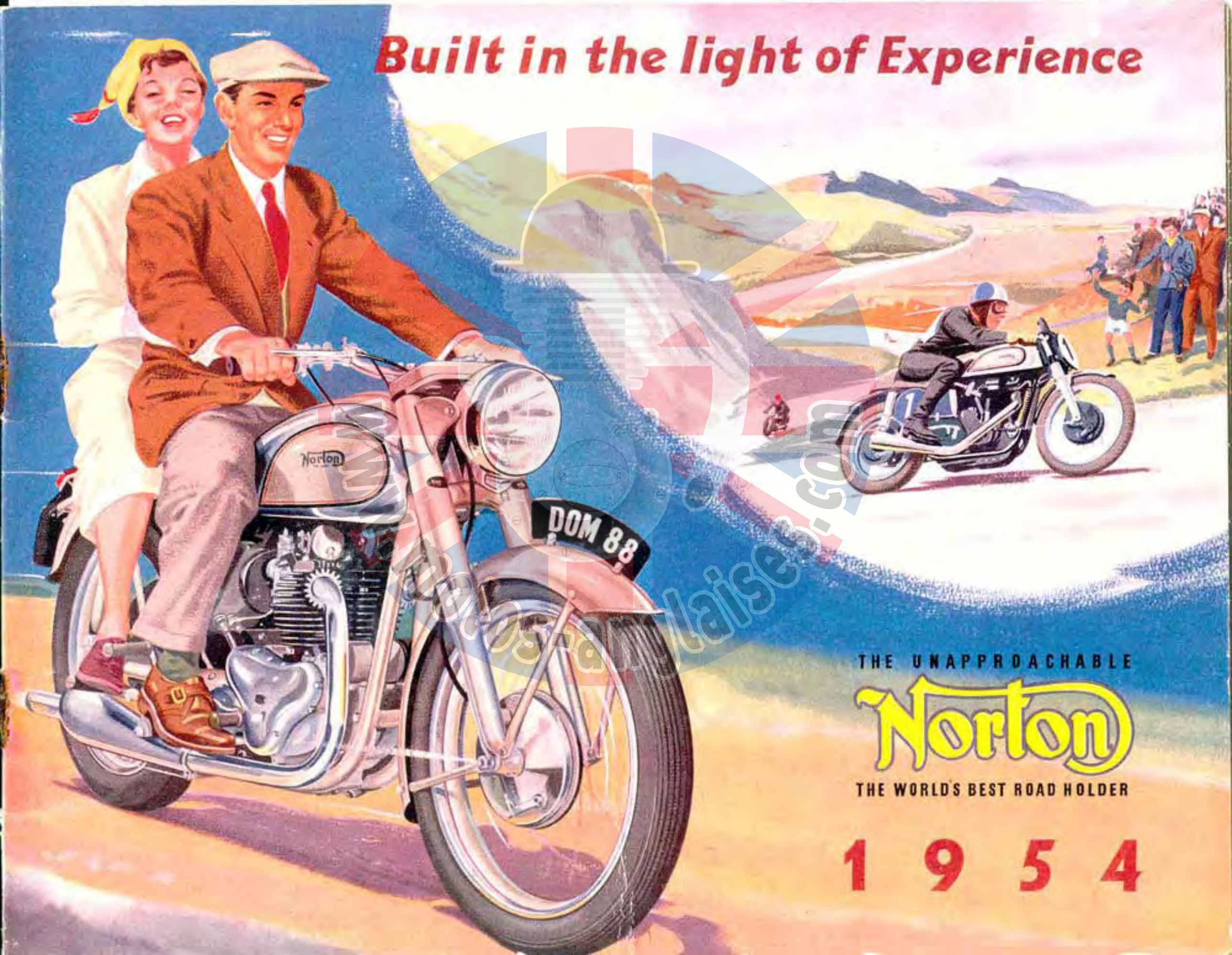
Built in the light of Experience



THE UNAPPROACHABLE

Norton

THE WORLD'S BEST ROAD HOLDER

1954

Motos Françaises.com

FOREWORD 1954...

www.moto-anglaise.com

Le Spécialiste des Motos Rapides
C. GARREAU
DISTRIBUTEUR CENTRAL
22, Rue Robert-Lindet, PARIS (15e)
Tél. VAUgirard 07-04 - R. C. Seine A[illegible]

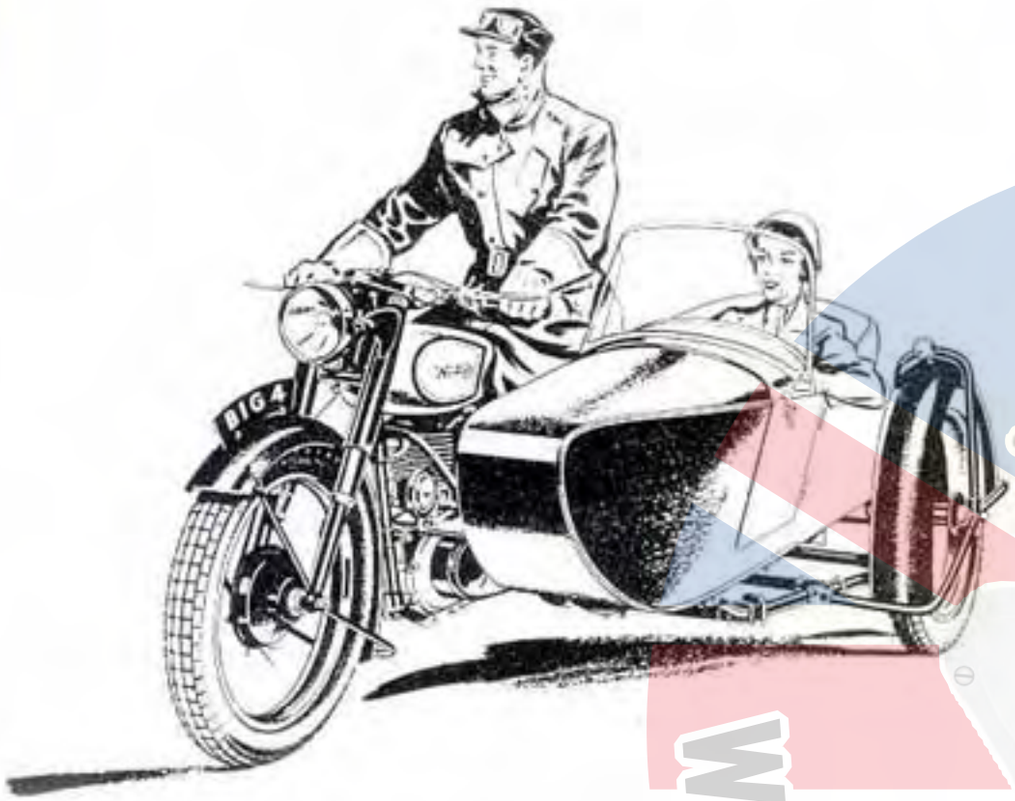
THERE are certain things recognised the world over as essentially British—incomparable in their class and distinguished for their unapproachable qualities. NORTON Motor Cycles, we believe, can rightly claim to belong to this unique family of British achievement.

The winning of 30 T.T. Races and innumerable World's Classic International Road Races constitutes a performance absolutely pre-eminent in the history of any sport. These are the glorious victories that make the headlines and add a brighter lustre to the prestige of the British Motor Cycle Industry.

Every day Norton machines in numberless countries in varied climates and conditions give performance and service every bit as unapproachable. Intensive research and development in the Norton factory, combined with first rate craftsmanship and material—backed by the wealth of experience gained in the sphere of racing and trials—goes into the building of the Norton Range we now proudly offer for 1954.

The New 1954 models incorporate all the very latest features directly developed from our years of racing successes, the New Nortons will give the sports or family man, enthusiast or novice, the qualities of reliability, road-holding and speed that truly make the NORTON—unapproachable.

Motos-Anglaises.com

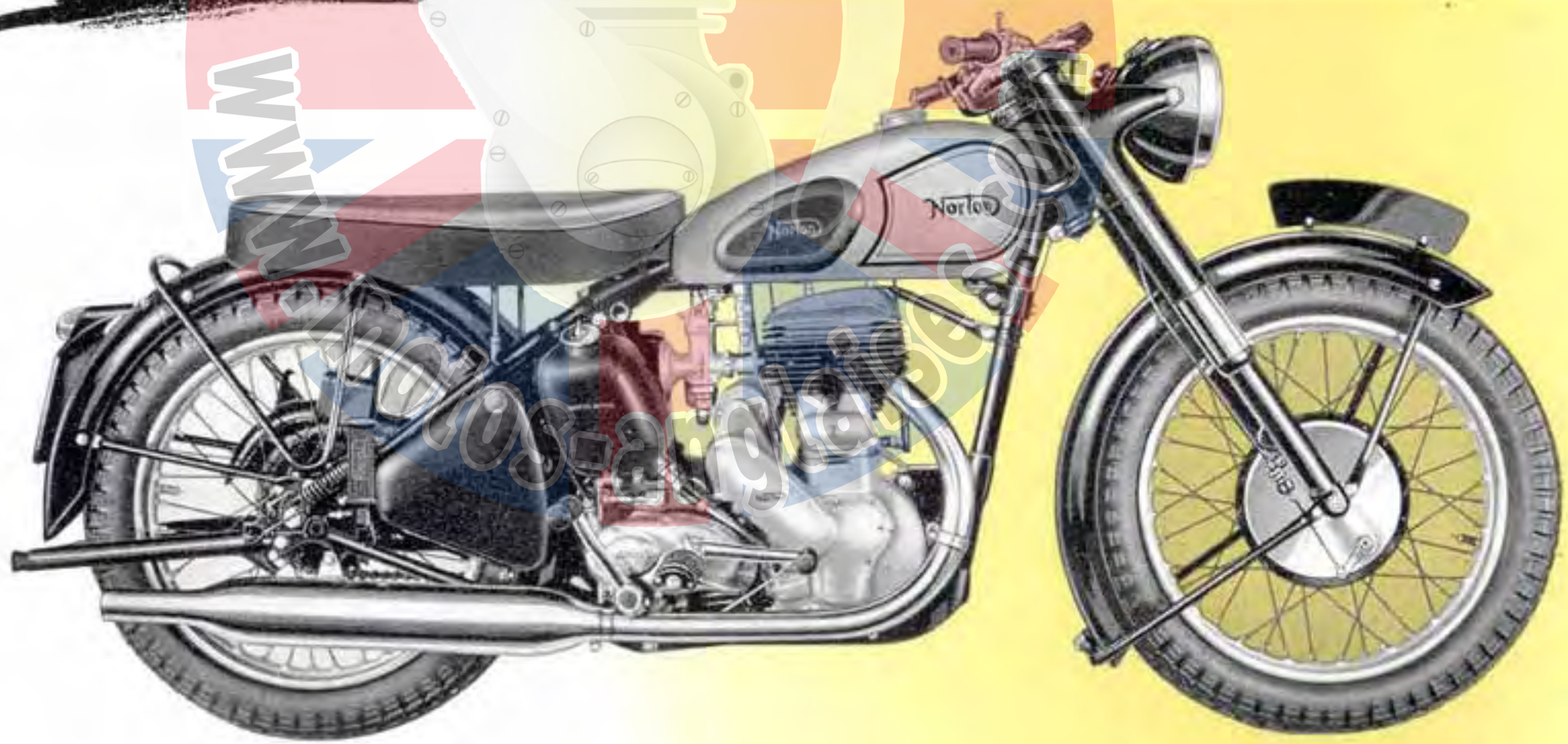


Norton BIG 4

Ideally suited and primarily intended for sidecar duty, the Big Four is quite suitable for solo use with its side valve engine of 596 c.c. capacity provided by a bore and stroke of 82 mm. and 113 mm. respectively. This machine is normally geared for sidecar use.

Model 16H.

To the same specification as the Big Four except that the 490 c.c. engine has a bore of 79 mm. and stroke of 100 mm.



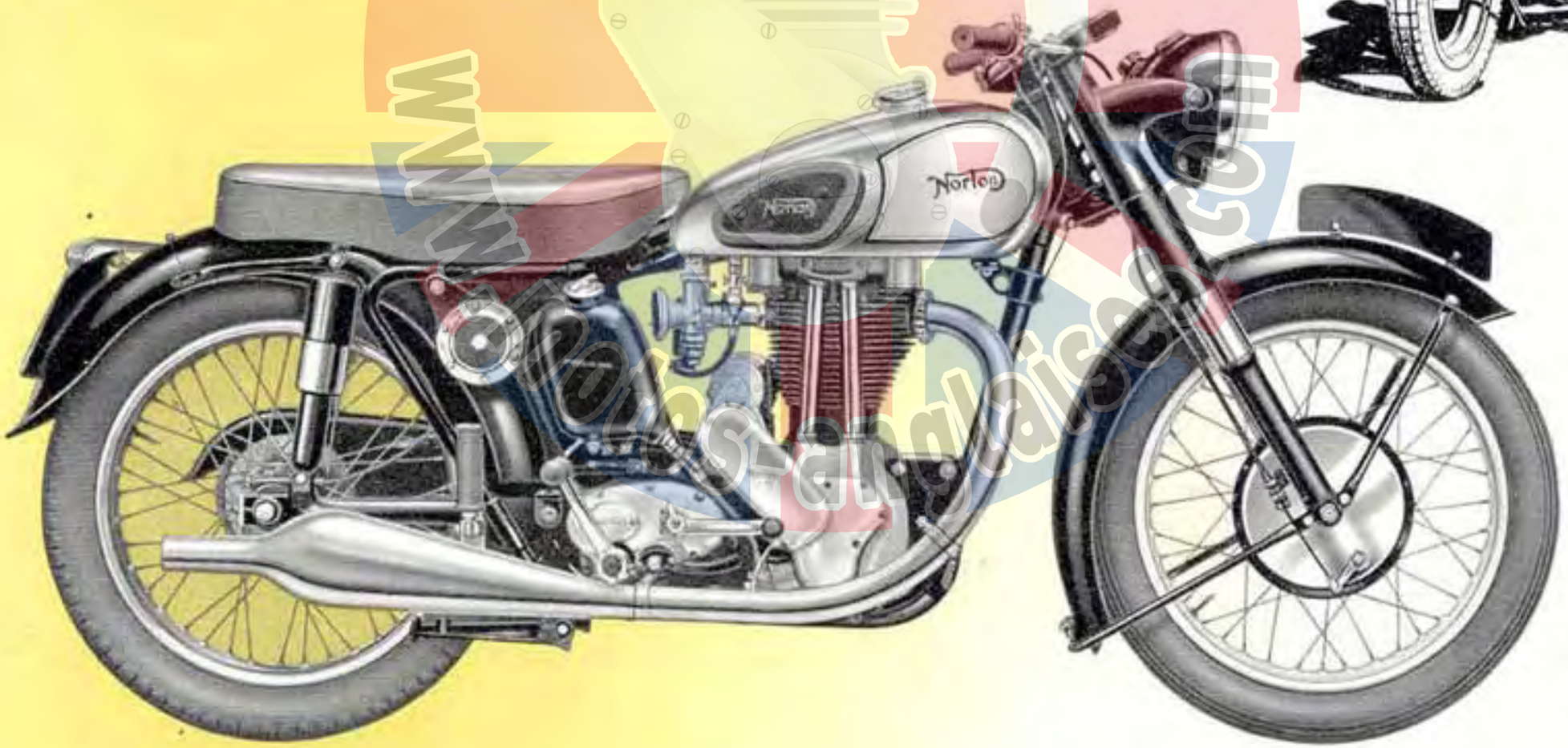
www.motorcycleenthusiasts.co.uk

Norton ES 2

Precision built, single cylinder, push rod operated overhead valve engine of modern design. Bore 79 mm., stroke 100 mm. Swinging arm rear suspension with oil damped shock absorbers. Oil damped telescopic "Roadholder" front forks.

Model 18.

To the same specification but without rear springing.



www.Motos-Anglaises.com

SUCCESSES

The Junior T.T. 1953 ▶

The Senior T.T. 1953 ▶

◀ W. R. Amm

◀ K. Kavanagh

G. Lefevre 1953 Winner of Bel d'or 24 hr Endurance Race at Monthlery, France ▶

J. Brett ▶

www.motos-anglaises.com

U.S.A.

DAYTONA CHAMPIONSHIP MEETING
100 Mile Amateur Race
1st John Miller
NATIONAL CHAMPIONSHIP, DODGE CITY, KANSAS
1st W. Tuman

ISLE OF MAN

INTERNATIONAL JUNIOR T.T. RACE
1st W. R. Amm (and lap record)
2nd T. K. Kavanagh
4th J. Brett
Manufacturers' Team Prize
INTERNATIONAL SENIOR T.T. RACE
1st W. R. Amm (and lap record)
2nd J. Brett

SINGAPORE

SINGAPORE MOTOR CLUB'S CORONATION "KILO" MEETING

500 c.c. Class	350 c.c. Class
1st James Muir	1st W. Cleugh
	2nd Ross Isle

SWEDEN

HEDEMORA T.T. 500 c.c.
1st K. Kavanagh

LUXEMBOURG

GRAND PRIX DE MOTO-CROSS DE LUXEMBOURG
1st L. Archer

SOUTHERN IRELAND

SKERRIES 100
500 c.c. Scratch Event 1st J. H. Lindsay

GERMANY

NORISRING RACE, NÜRNBERG

350 c.c.	500 c.c.
1st W. R. Amm	1st W. R. Amm
	2nd T. McAlpine
	3rd A. Goffin

FRANCE

GRAND PRIX INTERNATIONAL, Lyons

500 c.c.	500 c.c. Sidecar
1st J. Collot	1st C. Smith

24 HOUR BOL d'OR, Monthlery
500 c.c. 1st Gustave Lefevre
Lefevre won Bol d'Or for the fifth year in succession.

SOUTH AFRICA

1953 TRANSVAAL "BLUE RIBAND" CHAMPIONSHIP

Junior Class	Senior Race
1st R. Allison	1st K. Robus
3rd C. Randall	2nd R. Allison
	3rd B. van Zyle

NATAL ROAD RACING CHAMPIONSHIP MEETING, Pietermaritzburg
Senior Race (15 laps)
1st G. Anderson
2nd J. Ogden
3rd P. Ogle
PORT ELIZABETH "200"

350 c.c. Class	500 c.c. Class
1st H. Theron	1st B. P. Castellani
3rd R. M. Travers	2nd G. Anderson
	3rd R. A. Allison

HOLLAND

INTERNATIONAL RACE MEETING, Zandvoort

350 c.c.	500 c.c.
1st G. Laing (And fastest lap)	1st W. T. McAlpine (And lap record)
2nd P. Heath	2nd P. Heath
	3rd R. T. Matthews

NORTHERN IRELAND

ULSTER GRAND PRIX

500 c.c.	350 c.c.
1st K. Kavanagh	1st K. Mudford
3rd J. Brett	

Manufacturers' Team Prize
Sidecar Race
1st C. Smith
2nd P. Harris
3rd J. Drion
NORTH WEST "200"

500 c.c. Class	Class Handicap
1st S. Lawton (And lap record)	1st T. H. Turner
2nd K. Kavanagh	2nd R. Knox
	3rd T. B. N. S. Smith

BELGIUM

20th CIRCUIT DE FLOREFFE

350 c.c. International Race	500 c.c. International Race
1st S. Lawton	1st K. Kavanagh
2nd K. Kavanagh	2nd W. R. Amm (And lap record)
3rd W. R. Amm (And lap record)	3rd S. Lawton

Sidecar Race
1st C. Smith
2nd E. S. Oliver (and lap record)
3rd J. Drion

INTERNATIONAL CIRCUIT des FRONTIERS

350 c.c. (10 laps)	500 c.c. (12 laps)
1st A. Goffin	1st J. Storr
2nd G. Laing	2nd J. Raffeld
3rd J. Storr	3rd L. Martin
	4th G. Laing

Sidecar (8 laps)
1st H. Haldemann
2nd M. Masury
3rd J. Deronne

SPAIN

GRAND PRIX OF MADRID
500 c.c. Race (50 laps—57 miles)
1st K. Collot 2nd A. Pinto
350 c.c. Race (40 laps—45 miles)
1st John Grace 2nd J. P. Bayle
500 c.c. Sidecar Race
1st H. Haldemann 2nd R. Benz

AUSTRALIA

NEW SOUTH WALES GRAND PRIX

350 c.c. (80 miles)	500 c.c. (80 miles)
1st H. Hinton	1st H. Hinton
3rd M. Quincey	2nd M. Quincey
	3rd R. W. Coleman

AUSTRALIAN TOURIST TROPHY RACES

Junior T.T.	Senior T.T.
1st M. Quincey	1st M. Quincey
2nd — Nicholls	2nd H. Hinton
3rd W. Anderson	3rd D. Powell

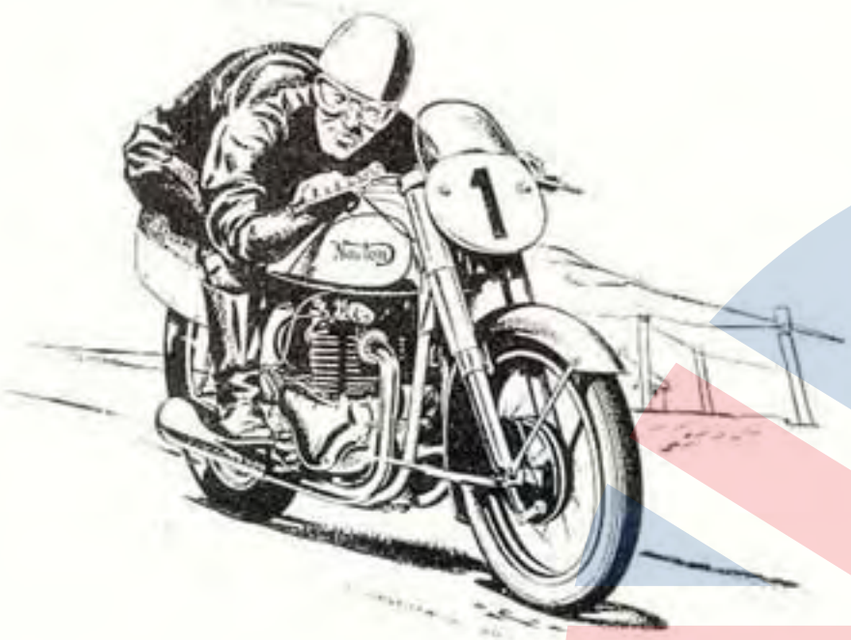
NEW ZEALAND

NEW ZEALAND GRAND PRIX
500 c.c. (61 miles) 1st L. V. Perry
NEW ZEALAND T.T.
Senior Event (74 miles)
1st R. Coleman
2nd Dene Hollier
3rd Len Perry
Coleman made a lap record

ENGLAND

"MOTOR CYCLING" SILVERSTONE MEETING
490 c.c. to 500 c.c. Sidecar Race
1st E. S. Oliver
2nd P. V. Harris
3rd C. Smith
Fastest Lap—E. S. Oliver and P. V. Harris
B.M.C.R.C. Championship 300 c.c. to 350 c.c. (20 laps)
1st J. A. Storr 2nd J. Surtees
Fastest Lap—T. K. Kavanagh

www.motoclubanglaises.com

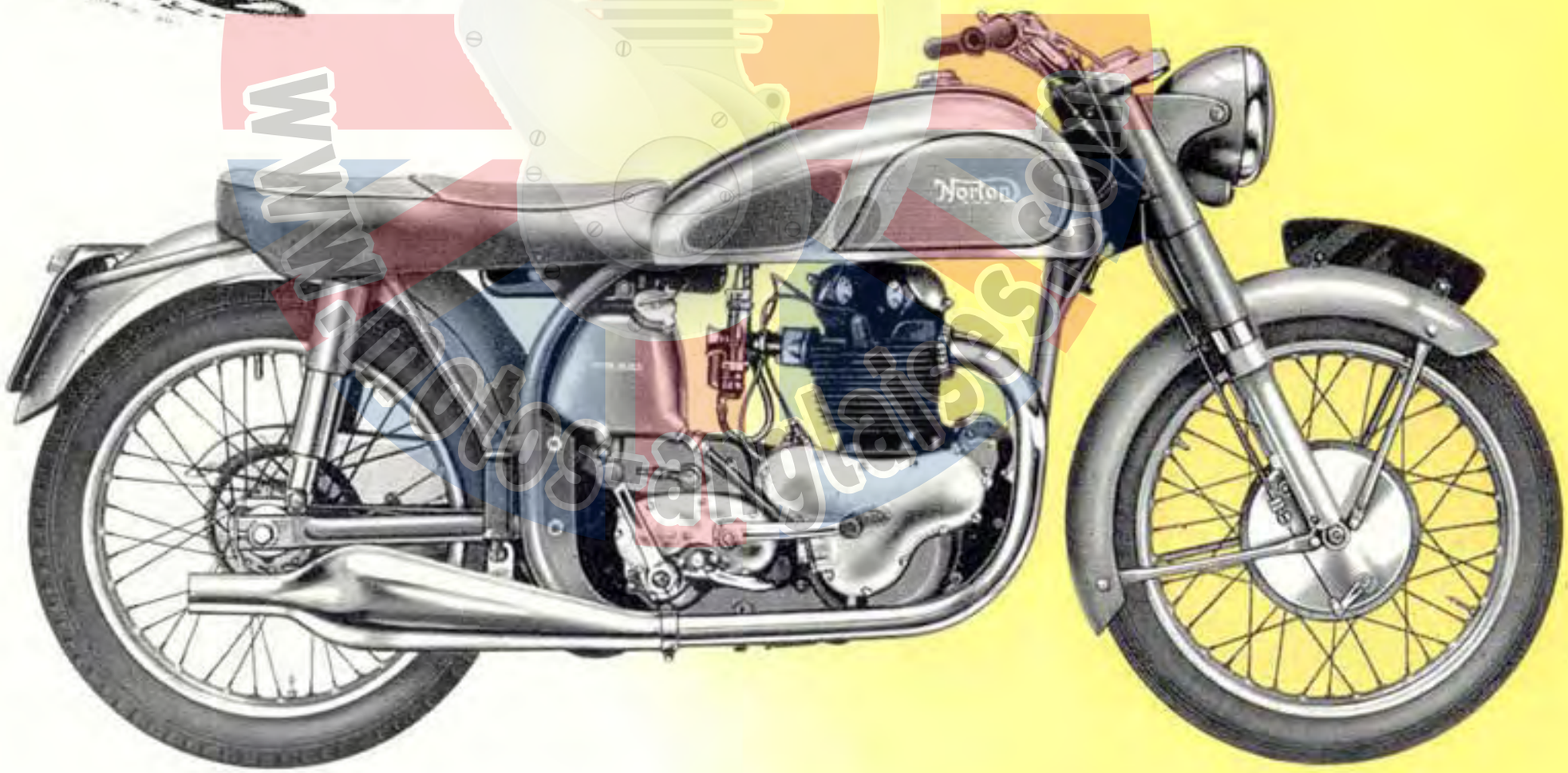


Norton

DOMINATOR DE-LUXE

Model 88.

497 c.c. vertical twin engine, swinging arm rear suspension, all welded duplex frame as used on Norton racing machines. 3½ gallon petrol tank of unique design. Modern in conception from stem to stern.



www.motorcycleclassics.com

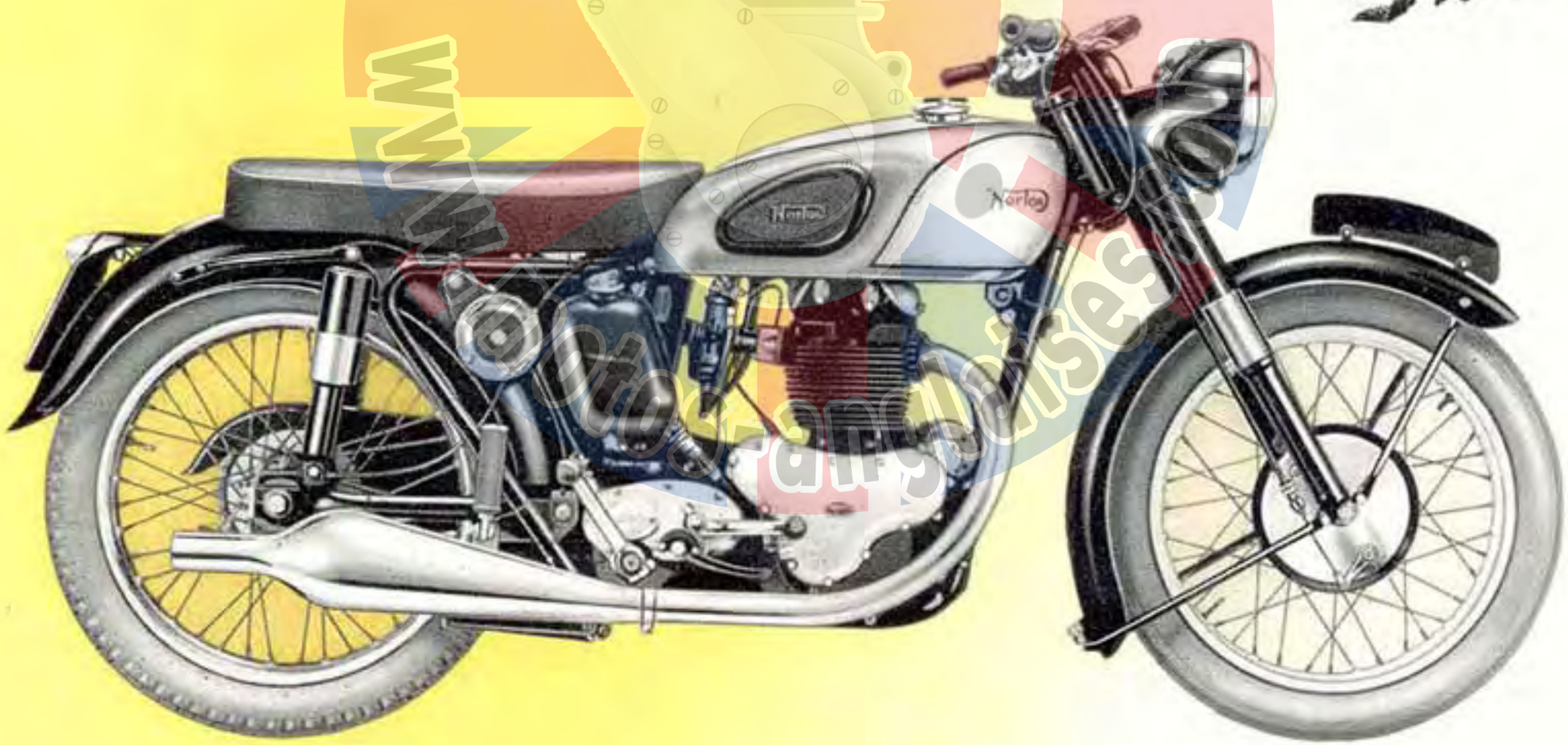
Norton DOMINATOR

Model 7.

Parallel twin, overhead valve engine 497 c.c. capacity providing unsurpassed performance. Oil damped suspension front and rear for maximum comfort and safety.

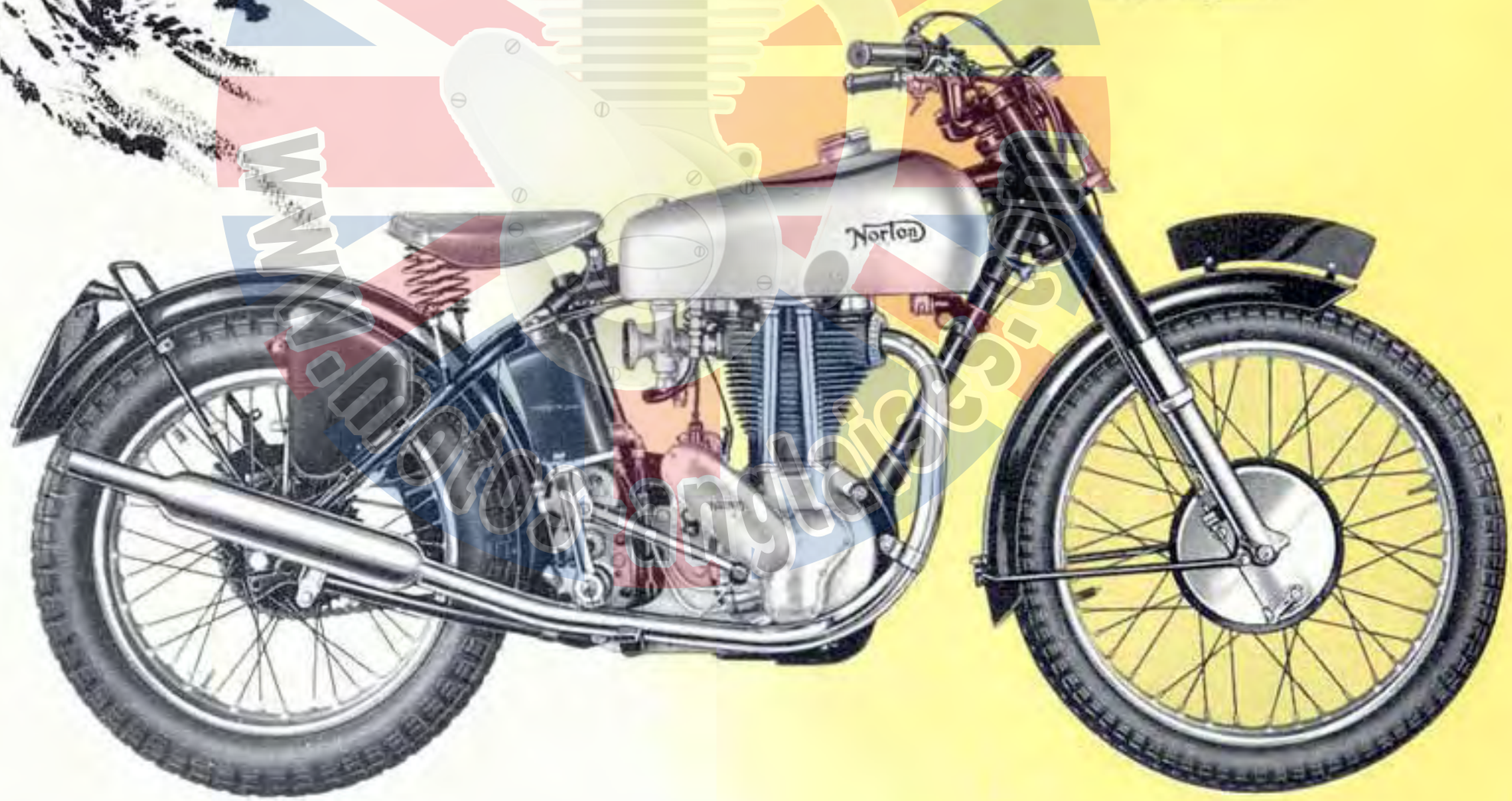
". . . the machine was ridden for many consecutive miles at an indicated 80 m.p.h. In these circumstances, the engine continued for mile after mile to churn out its power with almost turbine-like smoothness and an entire absence of fuss."

MOTOR CYCLE, 4th June, 1953.



Norton 500 T

A single purpose machine designed and built solely for reliability trials. 490 c.c. single cylinder, all alloy overhead valve engine. Totally enclosed and automatically lubricated. Folding kickstarter. Lightweight frame with undershield, side and rear stands, 100% steering lock. Narrow alloy mudguards.



www.motorcycleengineers.co.uk

Norton

GENERAL SPECIFICATION

FRAMES

Models 16H, Big Four and 18 are built with a rigid, full cradle frame of immense strength. Manufactured from high grade, solid drawn steel tubes, brazed into accurately machined lugs.

Models ES.2 and Dominator 7 employ a frame of similar general design but incorporating the pivoted fork rear suspension used so successfully for the past few years on racing machines. In this design, the pivoting fork is mounted on Silentbloc rubber bushes which require no maintenance, suspension being provided by leak proof hydraulically damped shock absorbers mounted again on rubber bushes on either side of the rear wheel.

A description of the Model 88 Dominator de Luxe will be found on page 11.

ENGINE

All single cylinder engines whether O.H.V. or side valve embody the same basic design wherein, a built up flywheel assembly employing a double row roller bearing crankpin is mounted on three ball and roller bearings carried in a light alloy die cast crankcase of modern design carrying separate inlet and exhaust timing gears. Lubrication is by means of a Duplex gear type pump. Wide rigidly mounted, adequately lubricated gears and cams operate large diameter flat base tappets. The inlet cam spindle also drives the Lucas magdyno by means of a single roller chain.

On push rod operated O.H.V. engines, the valve rockers mounted in a light alloy rocker box and running on bronze bushes are actuated by light alloy push rods with hardened steel ends. Adjustment takes place at the upper ends of the push rods, a detachable cover being provided for the purpose of accessibility. Rocker box lubrication is taken from a banjo fitting in the return oil union, surplus oil draining back to the sump via the push rod cover tubes and a drilled hole in the cylinder barrel.

The vertical twin engines are fully described on page 12.

TRANSMISSION

A $\frac{1}{2}'' \times \frac{5}{16}''$ single roller primary chain housed in a pressed steel oil bath chaincase of patented design transmits the engine power to a multiplate Ferodo lined clutch which incorporates a dual action, vane type shock absorber. The medium close four speed gearbox of proved reliability is pivotally mounted and readily adjustable for chain tension.

The shafts are short and robust, the gears being wide and precision machined. A light, positive, fully enclosed, automatically lubricated gear change mechanism is built into each gearbox. The final drive chain of $\frac{5}{8}''$ pitch $\times \frac{1}{4}''$ wide, is on the nearside and is equipped with a top run chainguard which adequately protects both rider and machine.

WHEELS AND BRAKES

A completely new front brake 8" dia. $\times 1\frac{1}{4}''$ wide provides considerably improved braking on all models. Light alloy shoes fitted with high efficiency linings operate on rigid cast drums ensuring positive yet progressive braking. All hubs are carried on rigid non-adjustable ball journals, a double row type being used on the brake side. The Smith's speedometer drive is taken from the offside of the rear hub.

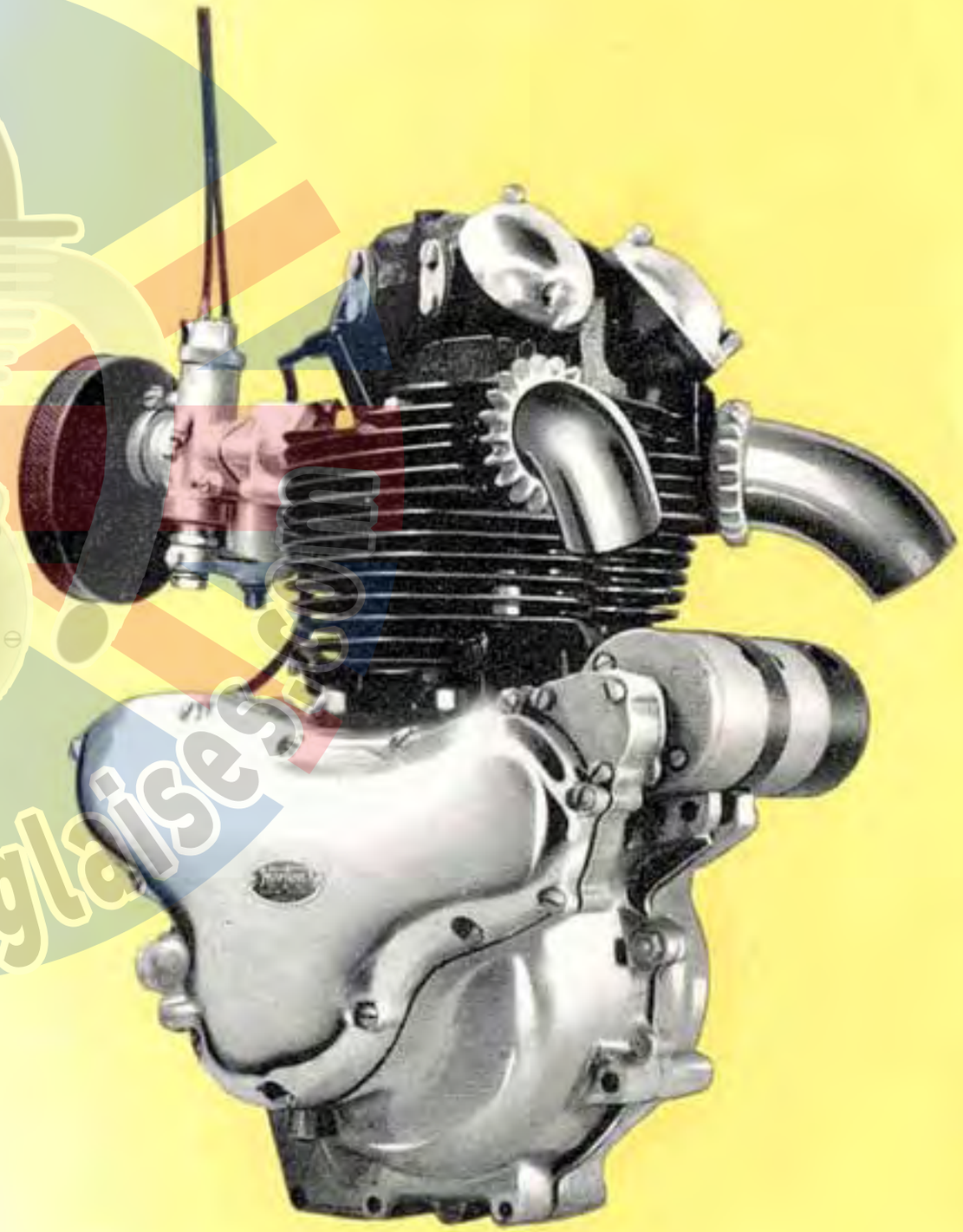
Norton GENERAL DETAILS

The latest addition to the Norton range, the Model 88 Dominator de Luxe, embodies the now well known all welded duplex frame as used in the works racing machines and the Manx models. Light in weight and of immense strength, this frame leads in design and provides an almost unbelievable degree of comfort coupled with the highest possible safety and stability.

The Norton "Roadholder" telescopic front fork needs no introduction. It provides controlled shock absorption for all conditions of surface by virtue of its double rate main springs and two-way oil control. For normal small deflections, the damping oil is readily displaced but a gradually increasing resistance is offered by the oil when heavy shock loads are encountered. The large diameter main tubes and widely spaced lugs ensure rigid steering control.

www.moto-anglaises.com

THE vertical twin cylinder engine used in Dominator and Dominator de Luxe embodies the same excellence of materials and workmanship as the other engines. A rigid, built up three piece crankshaft is carried on large capacity ball and roller bearings. The forwardly mounted camshaft is operated by a roller chain, the cams actuating hollow cast iron tappets of large proportions but low weight which in turn lift the valves through the medium of short tubular steel push rods running in cast tunnels in both cylinder head and cylinder block. The cylinder head is unique in that the exhaust valves are more widely spaced than the inlet, ensuring ample cooling in the hottest area. The rocker box is an integral part of the cylinder head and carries the rockers on hardened steel spindles, adjusters being carried in the rocker ends. Lubrication is by a double gear pump and follows the same lines as the other engines.



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TABULATED SPECIFICATIONS

MODELS	16H	Big 4	18	ES.2	500T	No. 7 Twin	88 Twin	MODELS
Bore and Stroke ..	79 × 100mm.	82 × 113mm.	79 × 100mm.	79 × 100mm.	79 × 100mm.	66 × 72·6	66 × 72·6	Bore and Stroke
Cylinder capacity ..	490 c.c.	596 c.c.	490 c.c.	490 c.c.	490 c.c.	497 c.c.	497 c.c.	Cylinder capacity
Compression ratio ..	4·9	4·5	6·16	6·16	6	6·7	6·7	Compression ratio
Valves	S.V.	S.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	Valves
Gear ratios—top ..	5	5·6	4·75	4·75	5·5	5	5	Gear ratios — top
,, ,, third ..	6·05	6·78	5·75	5·75	8·1	6·05	6·05	,, ,, third
,, ,, second ..	8·85	9·9	8·4	8·4	13·15	8·85	8·85	,, ,, second
,, ,, bottom	14·88	16·6	14·2	14·2	18·2	14·88	14·88	,, ,, bottom
Saddle height ..	29″	29″	29″	31″	32″	31″	31″	Saddle height
Wheel base	54½″	54½″	54½″	54½″	53″	54½″	55½″	Wheel base
Overall length ..	84½″	84½″	84½″	84½″	82″	84½″	84″	Overall length
,, width ..	28″	28″	28″	28″	28″	28″	26″	,, width
Ground clearance ..	5½″	5½″	5½″	6½″	7¼″	5½″	6¾″	Ground clearance
Weight	367 lbs.	373 lbs.	374 lbs.	379 lbs.	300 lbs.	413 lbs.	393 lbs.	Weight
Petrol tank capacity ..	3½ galls.	3½ galls.	3½ galls.	3½ galls.	2½ galls.	3¾ galls.	3½ galls.	Petrol tank capacity
Oil tank capacity ..	4 pts.	4 pts.	4 pts.	4 pts.	3½ pts.	4 pts.	4½ pts.	Oil tank capacity
Tyre size—front ..	3·25 × 19	3·25 × 19	3·25 × 19	3·25 × 19	2·75 × 21	3·25 × 19	3·00 × 19	Tyre size—front
,, ,, rear ..	3·25 × 19	3·25 × 19	3·25 × 19	3·25 × 19	4·00 × 19	3·50 × 19	3·50 × 19	,, ,, rear
Brake dimensions ..	FRONT—8″ dia. × 1¼″ wide				REAR—7″ dia. × 1¼″ wide			Brake dimensions
Chains	½″ PITCH × ·305″ WIDE FRONT. ⅜″ PITCH × ¼″ WIDE REAR.							Chains

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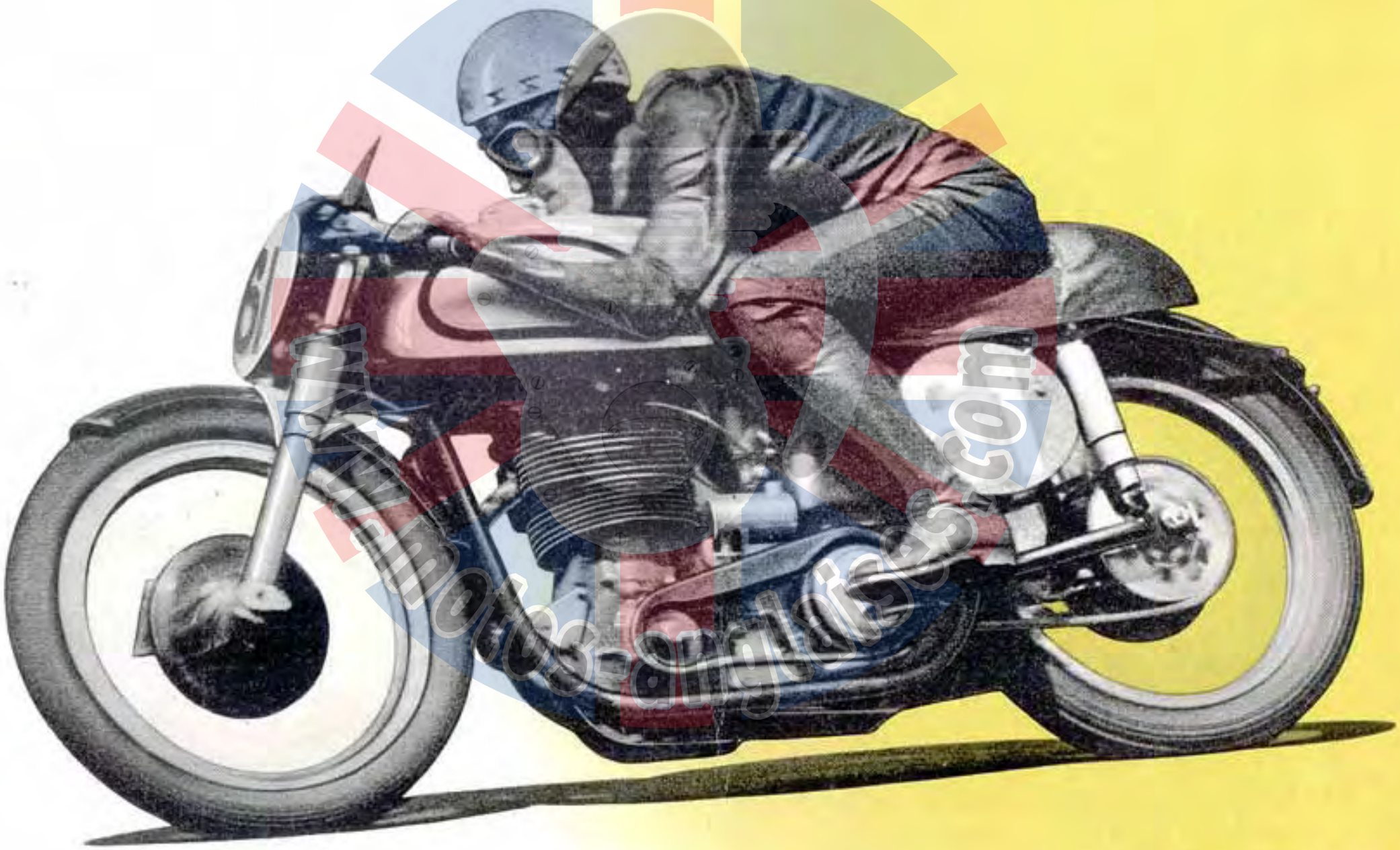

W. R. Amm—winner of the 1953 Junior and Senior T.T. Races.

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GUARANTEE

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 be 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 or 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 and specifications subject to alteration without previous notice.

NORTON MOTORS LIMITED

BRACEBRIDGE STREET, BIRMINGHAM 6, ENGLAND

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Printed in England.