

The Unapproachable



Le Spécialiste des Motos Rapides
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BUILT IN THE LIGHT OF

Experience

Introducing . . .

THE **1956** NORTON MACHINES



The NORTON record of achievement . . . the fame and reputation of the name . . . is known far and wide; it stands as a beacon in a world of progress and advancement. The world's best road holder. For the most fastidious rider there is a pride of ownership with NORTON, incomparable pleasure, and thousands of miles of perfect and sufficient service.

Only the best quality material and equipment is used in the building of the 'Unapproachable' . . . coupled with faultless design and attention to detail. Quality inspection at all stages of manufacture — cost is always a secondary consideration — here are the secrets of NORTON perfection: the reason for the constant reliability that gives every NORTON owner confidence and satisfaction.

The 1956 NORTON range of models are the best modern craftsmanship can produce . . . complete with numerous refinements . . . with enhanced performance . . . with traditional NORTON road-holding and all the attributes that have made the name NORTON famous throughout the world.

There is a new 350 c.c. model single and a 600 c.c. Twin introduced for the first time, both with a sparkling performance.

New details include: engines of higher compression ratio to take full advantage of modern fuels: high lift cams: softer front springing: improved riding position: increased steering lock: better mudguarding: full width hubs on all models: adjustable rear damping suspension units: modified rear chain adjustment: battery enclosure and styling of matching shape with re-designed oil tank.

There are numerous other features which modern technique and fashion demand. Every detail has had prolonged tests on road and track. Over 150,000 miles has been covered by staff testers proving 1956 models. Positive hair-line steering; road-holding that is unsurpassed; brakes that are smooth and efficient; everything to harmonise with the amazing engine performance—rapid acceleration—the smooth surge of power—all the qualities appropriate and acceptable to a discerning motor cycling public.

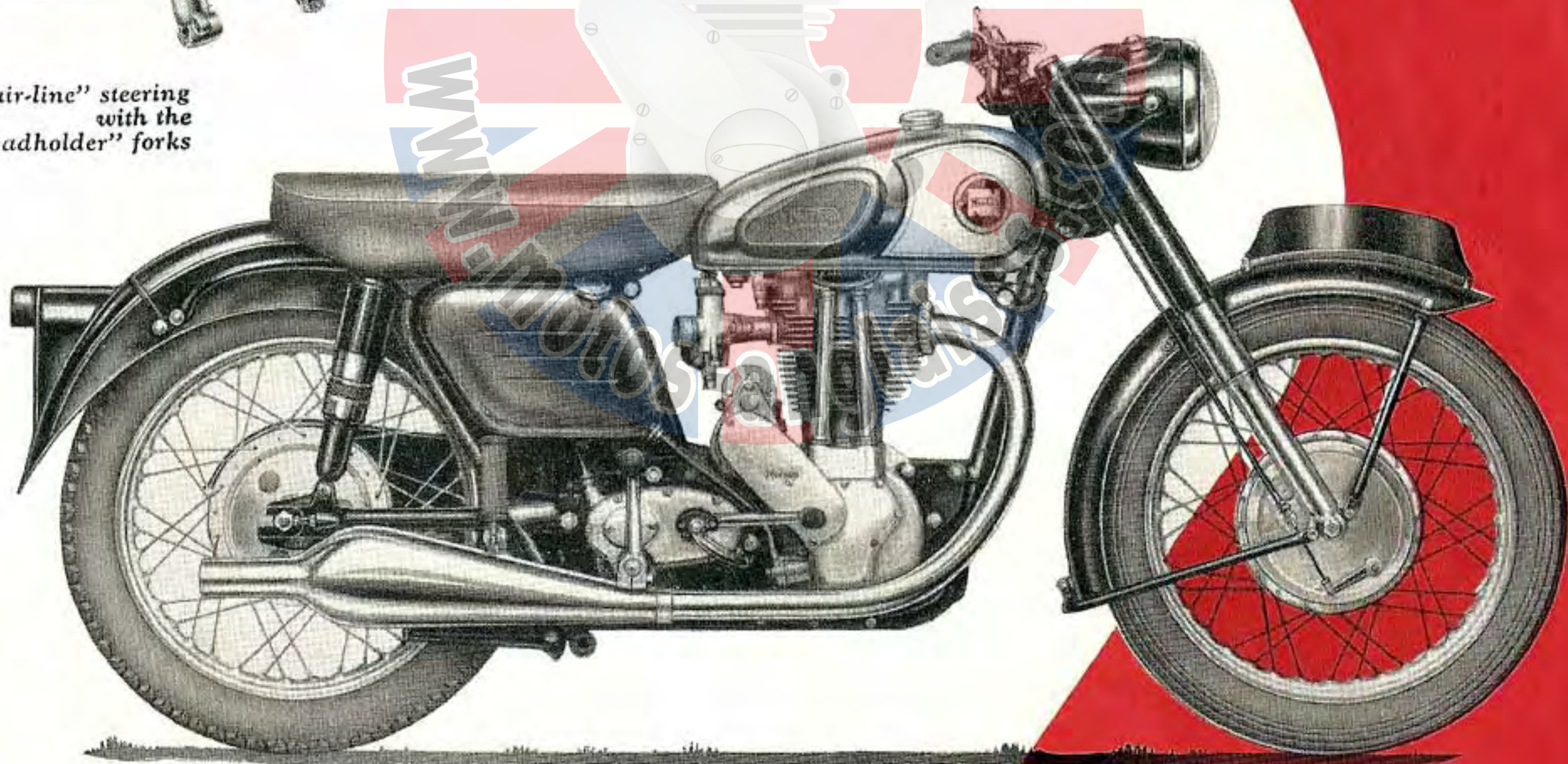
Norton

The World's Best Road Holder

Model 50

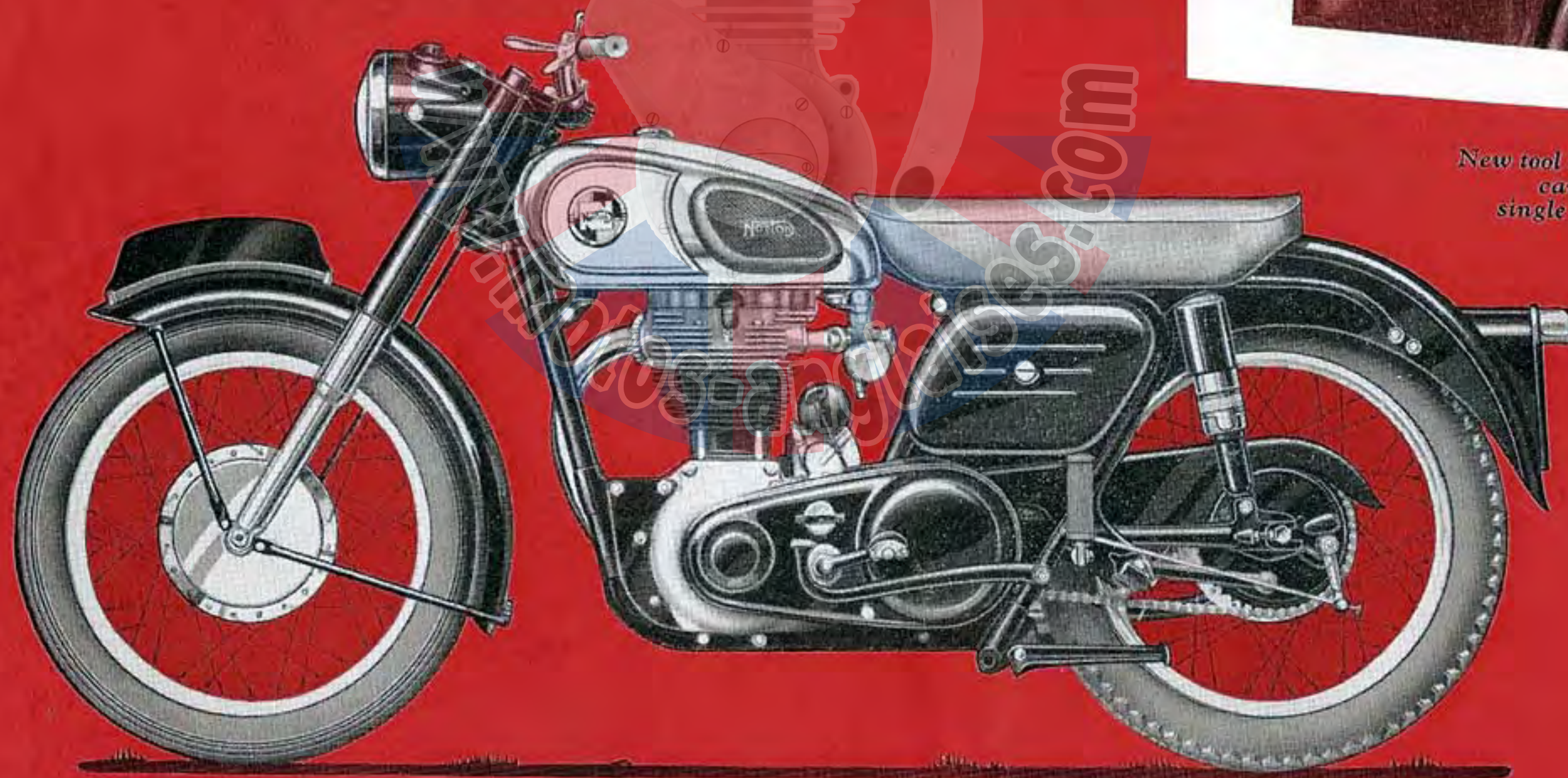
Re-introduced into the Norton range the Model 50
is a 350 c.c. machine with a sparkling performance
combined with economical running.

"Hair-line" steering
with the
"Roadholder" forks



Model ES2

A popular 500 c.c. machine of proved design.
1956 modifications include full width hubs;
re-designed cam gear and higher compression engine
give a marked increase in performance.



New tool box and battery
carrier fitted to all
single cylinder models

Model 19S

The very successful Model 19S has the same specification as the Model ES2 but with 596 c.c. O.H.V. engine. A delightful sidecar machine or fast touring solo mount.

Re-designed dual seat
fitted to
Models 50, ES2 and 19S

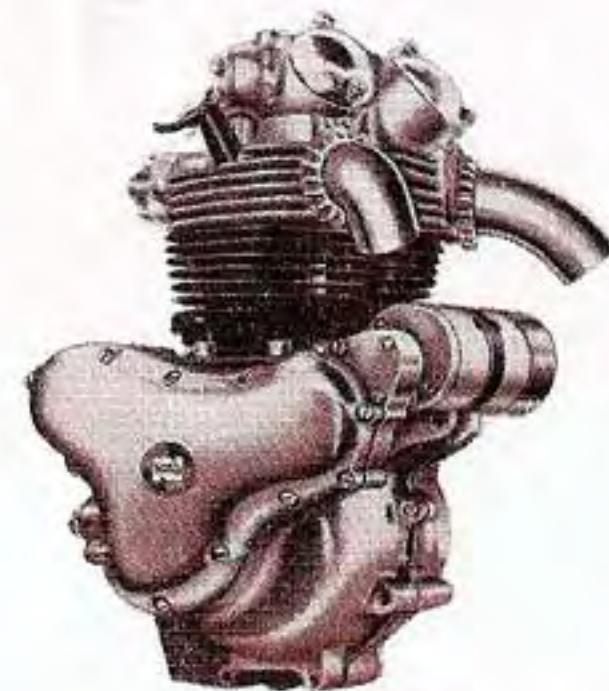
Norton

BUILT IN THE LIGHT OF EXPERIENCE



Model 88

Fitted with duplex welded frame and the famous
497 c.c. Dominator engine,
the Dominator de Luxe Model 88 is unquestionably
the most modern machine in its class.



The world renowned
Dominator engine

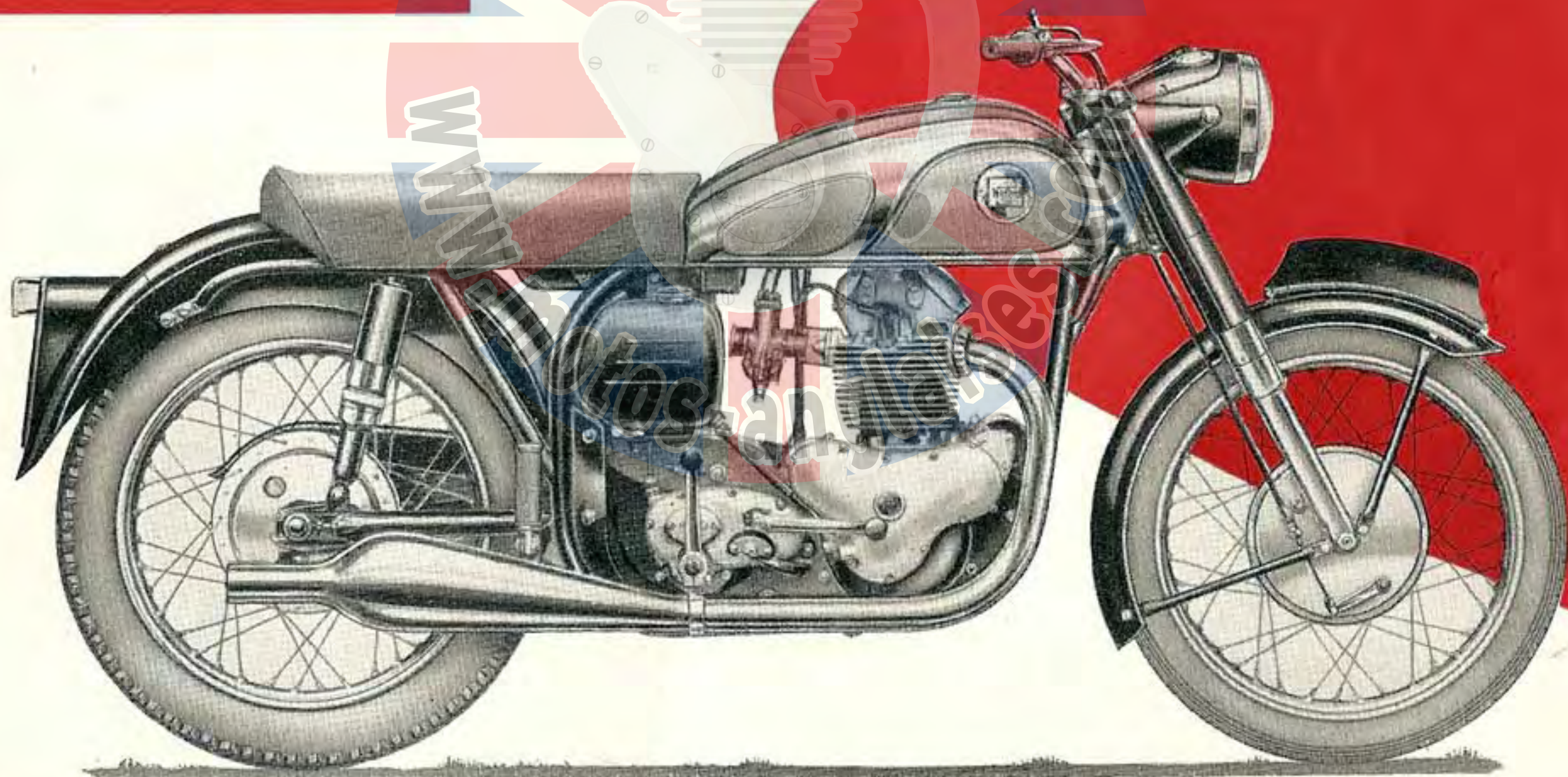


Model 99



Full width hubs are standard specification on all models

The Dominator de Luxe Model 99 fitted with a 597 c.c. vertical twin cylinder engine has similar specification to the Model 88. This exciting new addition to the Norton range is unsurpassed in both appearance and performance.



Manx

30-40

Accepted as the most successful
standard production
racing machine in the world

ENGINE: Model 30M—Bore 86 mm., stroke 85.62 mm., capacity 499 c.c.

Model 40M—Bore 76 mm., stroke 76.7 mm., capacity 348 c.c.

Cylinder Barrel and Head light alloy. Twin overhead camshaft valve operation. Forged light alloy piston. Forged 'H' section steel connecting rod with roller bearing big end. Magnesium alloy crankcase. Lucas rotating magnet magneto, Amal T.T. type carburetter with weir type float chamber.

TRANSMISSION: Primary Chain $\frac{1}{2} \times 305$ ". Rear Chain $\frac{5}{8} \times \frac{1}{4}$ ". Lubrication to primary chain by jet feed from frame loop reservoir. Four speed "Norton" gearbox with remotely mounted positive foot operation.

RATIOS: Model 30M with 23T engine sprocket—4'23:1, 4'65:1, 5'63:1, 7'52:1. Model 40M with 19T engine sprocket—5'12:1, 5'64:1, 6'81:1, 9'11:1. 3 plate clutch with Ferodo friction discs.

FRAME: Patented duplex loop tubular con-

struction with cross-over tubes on steering head. All joints bronze welded. Swinging arm, phosphor bronze bushed, mounted on steel pivots. Oil damped suspension, Norton telescopic "ROAD-HOLDER" forks.

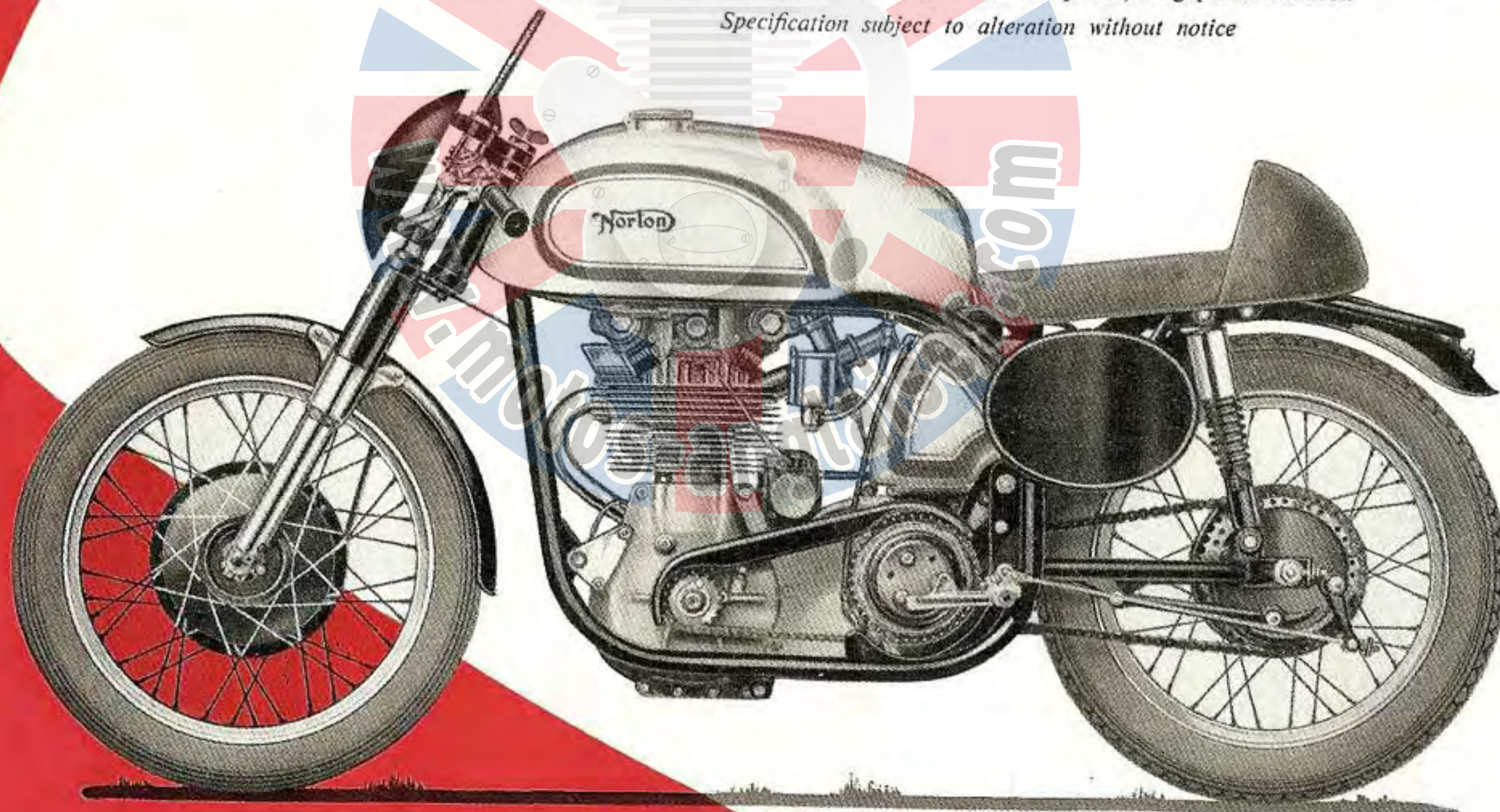
WHEELS: Alloy Rims, magnesium hubs front and rear. Brakes 8" dia. front, 7" dia. rear. Front ribbed 3.00" x 19", rear studded 3.50" x 19". Light alloy rubber mounted racing mudguards.

TANKS: Light alloy petrol tank having capacity of 5 gallons, secured by "Quick Release" central strap. Light alloy oil tank, capacity 7½ pints. quick action filler caps.

REV. COUNTER: Smiths 9,000 r.p.m. magnetic rev. counter fitted on head lug, driven by cambox bevel shaft extension.

OTHER EQUIPMENT: Sponge rubber racing seat with back rest, Wire gauze fly screen, Racing number plates, Megaphone exhaust.

Specification subject to alteration without notice



NORTON

Successes

1955

AUSTRALIA

VICTORIA GRAND PRIX—*Ballaarat*

Junior Grand Prix

1st M. Quincey 2nd K. Campbell
3rd R. Barker

Senior Grand Prix

1st K. Campbell 2nd R. Brown
3rd M. Stephens

NEW SOUTH WALES GRAND PRIX

Mount Druitt, Sydney

Junior Grand Prix (10 laps)

1st H. Hinton, Senr. 2nd E. Hinton

Senior Grand Prix (10 laps)

1st E. Hinton 2nd B. Hodgkinson
3rd D. Flynn

AUSTRALIAN T.T. RACE, *Bathurst, N.S.W.*

350 c.c. Junior Championship

1st H. Hinton

500 c.c. Senior Championship

1st H. Hinton 2nd R. W. Coleman
3rd E. Hinton

NEW ZEALAND

N.Z. T.T., *Mangere Circuit, Auckland*

Junior T.T.

1st Ken Mudford (and fastest lap)

N.Z. GRAND PRIX

Cust Circuit, Nr. Christchurch

Senior Grand Prix

1st J. Swarbrick 2nd S. Jenson
3rd C. Jones

N.Z. NATIONAL T.T. MEETING

Patea Circuit, Wanganui

100 mile Senior Race

1st R. W. Coleman 2nd Syd Jenson
3rd Ken Mudford

RHODESIA

CORONATION PARK RACE MEETING

S. Rhodesia

350 c.c. SCRATCH RACE

1st Phil Snyman

500 c.c. SCRATCH RACE

1st Ken Robus

FRANCE

24-HOUR BOL D'OR RACE

Best Performance — G. LeFevre

SWEDEN

SWEDISH GRAND PRIX, *Hedemora*

350 c.c. 1st J. Hartle (and fastest lap)
2nd J. Surtees
3rd J. Brett

INTERNATIONAL MOTO-CROSS

St. Anthonis, Holland

1st L. R. Archer

INTERNATIONAL MOTO-CROSS

Verdun, France

1st Eric Cheney

INTERNATIONAL MOTO-CROSS

Mayenne, France

1st L. R. Archer

INTERNATIONAL MOTO-CROSS

Luxemburg

1st L. R. Archer

FINLAND

GRAND PRIX OF FINLAND, *Helsinki*

350 c.c. 1st K. Campbell

500 c.c. 1st N. Schroder

SOUTH AFRICA

S.A. CHAMPIONSHIP MEETING,

Palmietfontein Circuit

250 c.c. (16 laps) 1st B. P. Castellani

500 c.c. (20 laps) 1st S. Setaro

GREAT BRITAIN

"MOTOR CYCLING" SILVERSTONE SATURDAY

490 c.c. to 500 c.c. Side-cars (5 laps)

1st W. G. Boddice (and fastest lap)

B.M.C.R.C. CHAMPIONSHIP

251 c.c. to 350 c.c. (17 laps)

1st J. Surtees (and fastest lap)

SCOTTISH SPEED CHAMPIONSHIPS

Kirkcaldy

350 c.c. (10 laps) 1st R. McIntyre

500 c.c. (10 laps) 1st R. McIntyre



John Surtees at "Motor Cycling" Silverstone Saturday



L.J. Archer, winner of many "Moto-Cross" events



Eric Oliver, 4 times Sidecar World Champion

Winner of 32 T.T. Races

Specification

FRAMES

All twin engines of both capacities are housed in the world famous all welded, duplex "Featherbed" frame, developed over the years of successful road racing. It is acknowledged that this frame provides the finest high speed road holding obtainable. The orthodox, cradle type, brazed up frame is used for the single cylinder range and is built from high grade drawn steel tubing, reinforced by steel or malleable iron lugs at strategic points, the whole being brazed into a rigid unit capable of withstanding the most arduous conditions. Rustproofed and stove enamelled in a durable and attractive finish.

ENGINES (TWINS)

The engine of the new Model 99 is identical in design to the well tried 497 c.c. Dominator twin engine and provides just that extra acceleration, maximum speed and reserve of power which all hard riders enjoy. Both engines have a compression ratio suitable for the modern high octane fuels and are lubricated on the dry sump principle through a multiple gear pump. Connecting rods are of light alloy operating on the immensely rigid built up crankshaft through detachable steel backed bearing shells. Camshaft and magneto have separate driving chains, the former being

equipped with an adjusting slipper. Cylinder head and rockerbox are a single light alloy casting with widely spaced exhaust ports and well shaped inlet tract; features largely responsible for the high specific output of both 597 c.c. and 497 c.c. engines.

ENGINES (SINGLES)

The new 348 c.c. engine follows the same lines as the 490 and 596 c.c. engines and has the same attractive characteristic low speed pulling power. On all these engines the built up flywheel assembly is carried on three ball and roller main bearings, a pinion on the timing side meshing with two separate gears to operate the O.H.V. valve mechanism through light alloy pushrods. Gear pump lubrication is employed, oil being fed to the roller bearing big end and to the rocker bearings. A modified exhaust cam, increased compression ratio and attention to the exhaust system has led to an increased performance from all single cylinder engines.

WHEELS AND HUBS

The impressive full width hubs introduced last year on the Dominator De Luxe have been so successful that they are now fitted to all models. The greater rigidity and in-

creased heat dissipation surface result in improved braking and longer lining life. The appearance is further enhanced by the polished light alloy brake plate and hub face. Ability to remove the rear wheel without disturbing the chain is a feature which is retained.

FRONT FORKS

The superb handling of all Norton models is attributable in no small degree to the robust structure of the "Roadholder" front fork. Progressively oil damped in both directions, the front wheel maintains almost constant contact with the ground ensuring a high degree of physical comfort and good braking.

TRANSMISSION

The patented, pressed steel, oil bath chaincase with single nut fixing, which has been a feature of Norton machines for many years, is retained throughout the range as is the vane type rubber buffer shock absorber incorporated in the multi-plate clutch. The well proved four speed, foot operated, gearbox also remains part of the general specification. It provides quick, smooth, gear changing at all speeds. A wide selection of gear ratios suitable for all purposes is available.

T A B U L A T E D

Specifications

MODELS	50	E.S.2	19S	88	99	30M	40M	MODELS
Bore and Stroke (m/m)	71 × 88	79 × 100	82 × 113	66 × 72.6	68 × 82	86 × 85.62	76 × 76.7	Bore and Stroke (m/m)
Cylinder Capacity	348 c.c.	490 c.c.	596 c.c.	497 c.c.	597 c.c.	499 c.c.	348 c.c.	Cylinder Capacity
Compression Ratio	7.3	7.1	6.4	7.8	7.4	9.45	9.45	Compression Ratio
Valves	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	Dble.O.H.C.	Dble.O.H.C.	Valves
Gear Ratio. Top	5.29	4.75	5	4.75	4.53	4.23	5.12	Gear Ratio. Top
„ „ Third	6.4	5.75	6.05	5.75	5.48	4.65	5.64	„ „ Third
„ „ Second	9.36	8.41	8.85	8.41	8.03	5.63	6.81	„ „ Second
„ „ Bottom	15.7	14.11	14.85	14.11	13.42	7.52	9.11	„ „ Bottom
Saddle Height	31"	31"	31"	31"	31"	30"	30"	Saddle Height
Wheel Base	56"	56"	56"	55½"	55½"	55"	55"	Wheel Base
Overall Length	86"	86"	86"	85½"	85½"	80½"	80½"	Overall Length
„ Width	29"	29"	29"	26½"	26½"	22"	22"	„ Width
Ground Clearance	6½"	6½"	6½"	6½"	6½"	5½"	5½"	Ground Clearance
Weight	382	389	393	390	395	313	307	Weight
Petrol Tank Capacity	3 Gal.	3 Gal.	3 Gal.	3½ Gal.	3½ Gal.	5 Gal.	5 Gal.	Petrol Tank Capacity
Oil Tank Working Capacity	4 Pts.	4 Pts.	4 Pts.	4½ Pts.	4½ Pts.	7½ Pts.	7½ Pts.	Oil Tank Working Cap.
Tyre Size—Front	3.25 × 19	3.25 × 19	3.25 × 19	3.00 × 19	3.00 × 19	3.00 × 19	3.00 × 19	Tyre Size—Front
„ „ —Rear	3.25 × 19	3.25 × 19	3.25 × 19	3.50 × 19	3.50 × 19	3.50 × 19	3.50 × 19	„ „ —Rear
Brake Dimensions	Front 8" dia. × 1½" wide. Rear 7" dia. × 1½" wide.					Front 8" dia. × 1½" wide. Rear 7" dia. × 1½" wide.		Brake Dimensions
Chains	½" Pitch × .305" wide front. ¾" Pitch × ¼" wide rear.					½" Pitch × .305 wide front. ¾" Pitch × ¼" wide rear		Chains

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 refit, or bear the cost of replacing or refitting 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:-

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 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 LTD.

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