

INTRODUCING THE NEW

'Smooth-Look'

Norton

RANGE

... the result of our unceasing search for perfection.

The 1957 "Smooth-Look" models have been developed from our wide experience and outstanding successes in International racing, combined with our acknowledged engineering skill. The modern Motor Cyclist will find in the "Smooth-Look" range a marque truly UNAPPROACHABLE.

PETROL TANK

An exciting new departure in tank styling embodying a detachable embellishment panel carrying kneegrip and motif. Enhancing still further the already stylish fuel tank on all models.

MODEL 50

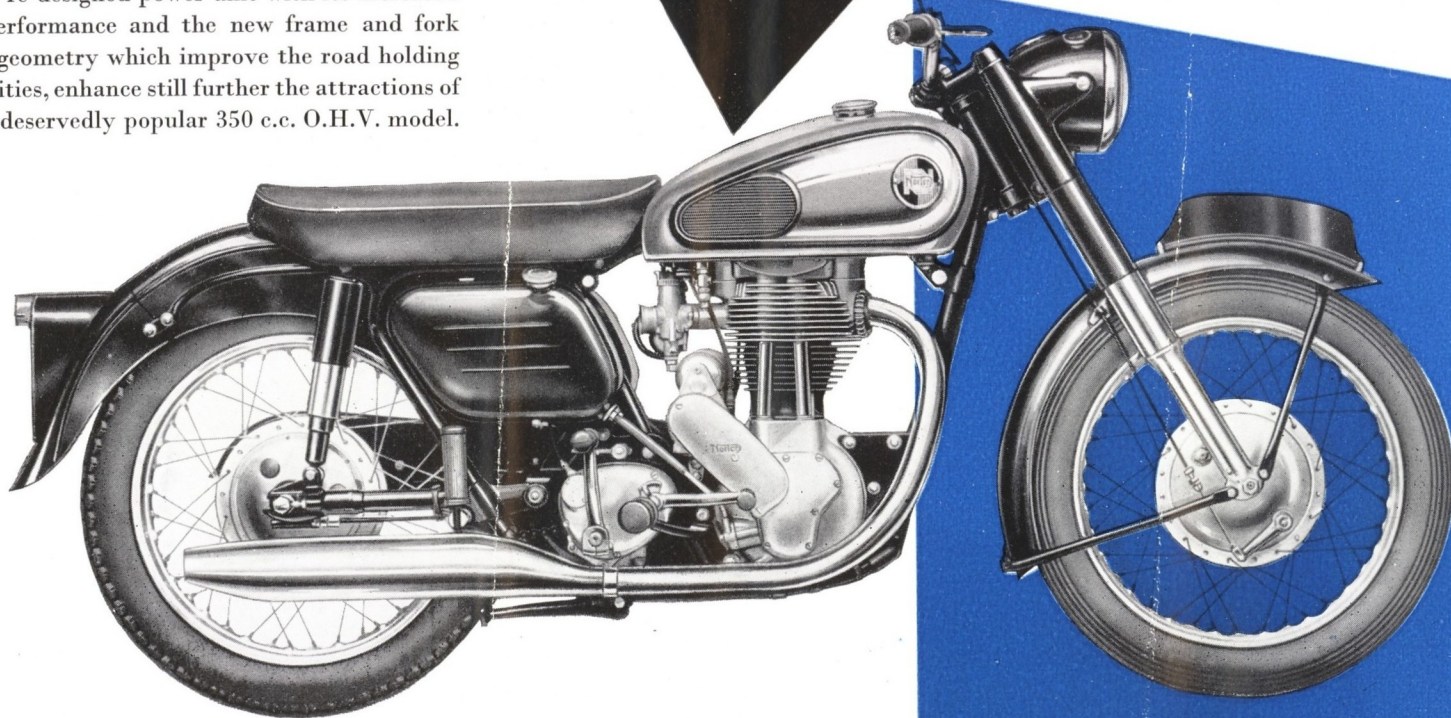
The re-designed power unit with its increased performance and the new frame and fork geometry which improve the road holding qualities, enhance still further the attractions of this deservedly popular 350 c.c. O.H.V. model.



MODEL 50

350 c.c. O.H.V.

Single



BUILT WITH THE NEW

Smooth

MODEL E.S.2

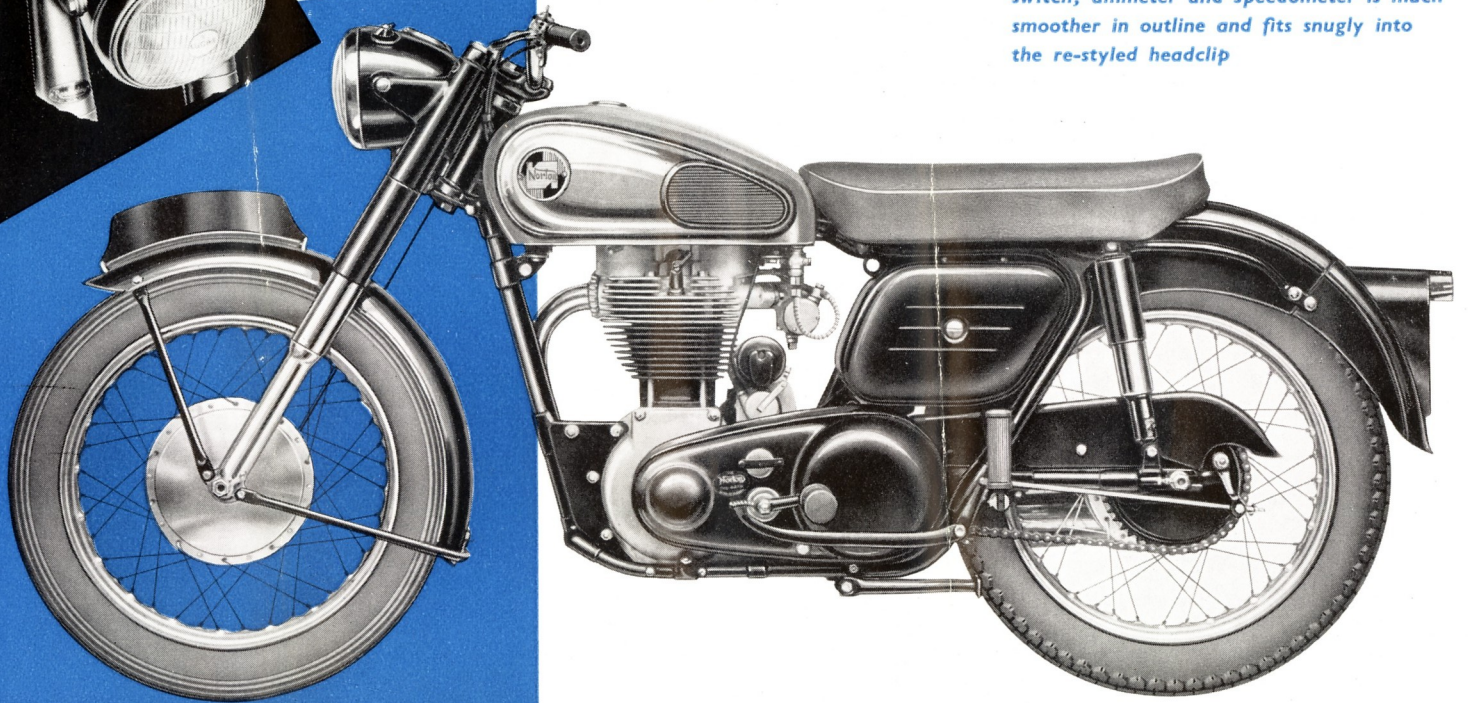
For the rider who prefers a larger engine the 500 c.c. O.H.V. in its latest 'Smooth-Look' guise is even more desirable. Its reliable and economical performance is undoubtedly without equal.

MODEL E.S.2.

500 c.c. O.H.V.
Single

HEAD LAMP

The new headlamp which carries also the switch, ammeter and speedometer is much smoother in outline and fits snugly into the re-styled headclip

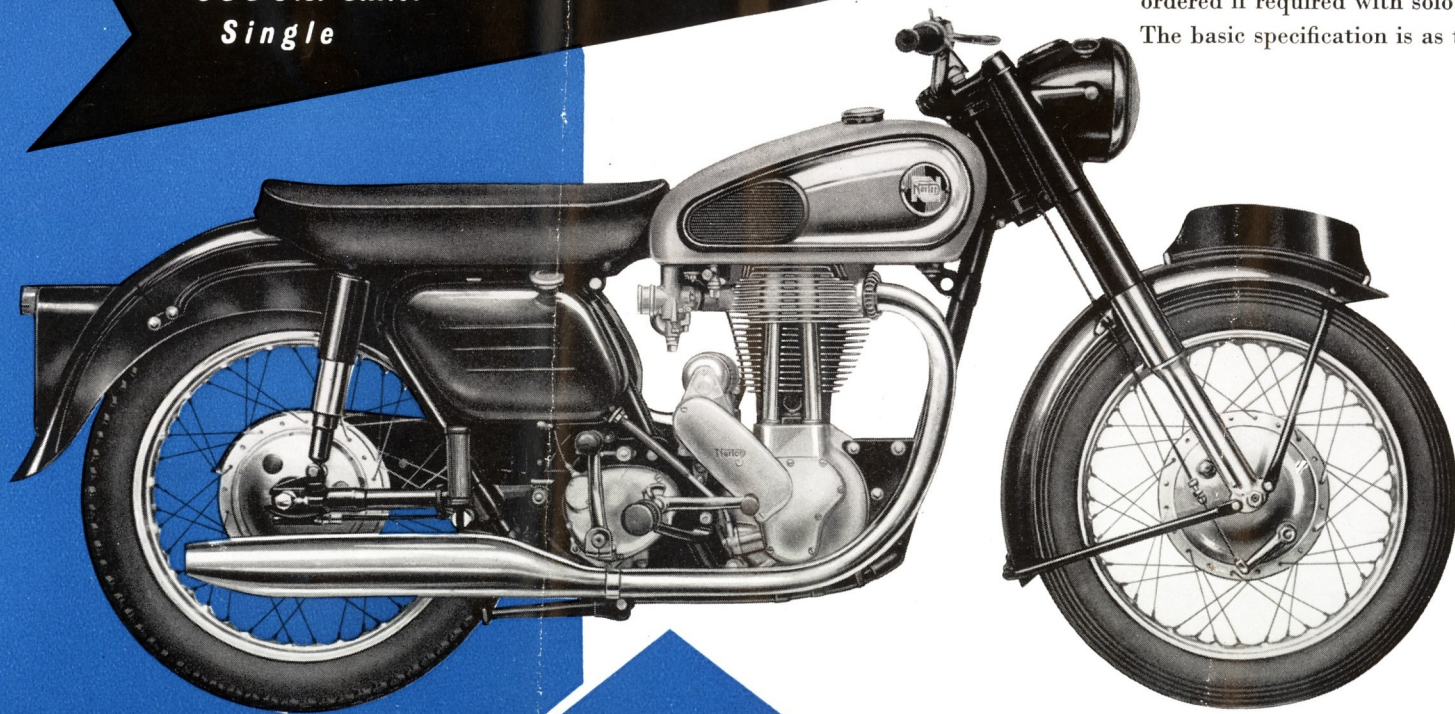


-Look' THE UNAPPROACHABLE NORTON RANGE

MODEL 19S

600 c.c. O.H.V.

Single

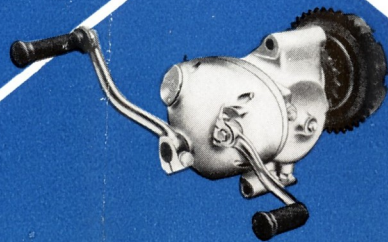


MODEL 19S

Intended primarily as a sidecar machine this 600 c.c. single cylinder model is equally attractive as a high geared solo mount, but must be specially ordered if required with solo gears. The basic specification is as the E.S.2.

GEARBOX

The new gearbox embodies all the best features of the earlier model plus improved oil retention, still snappier gear changing and contemporary styling.



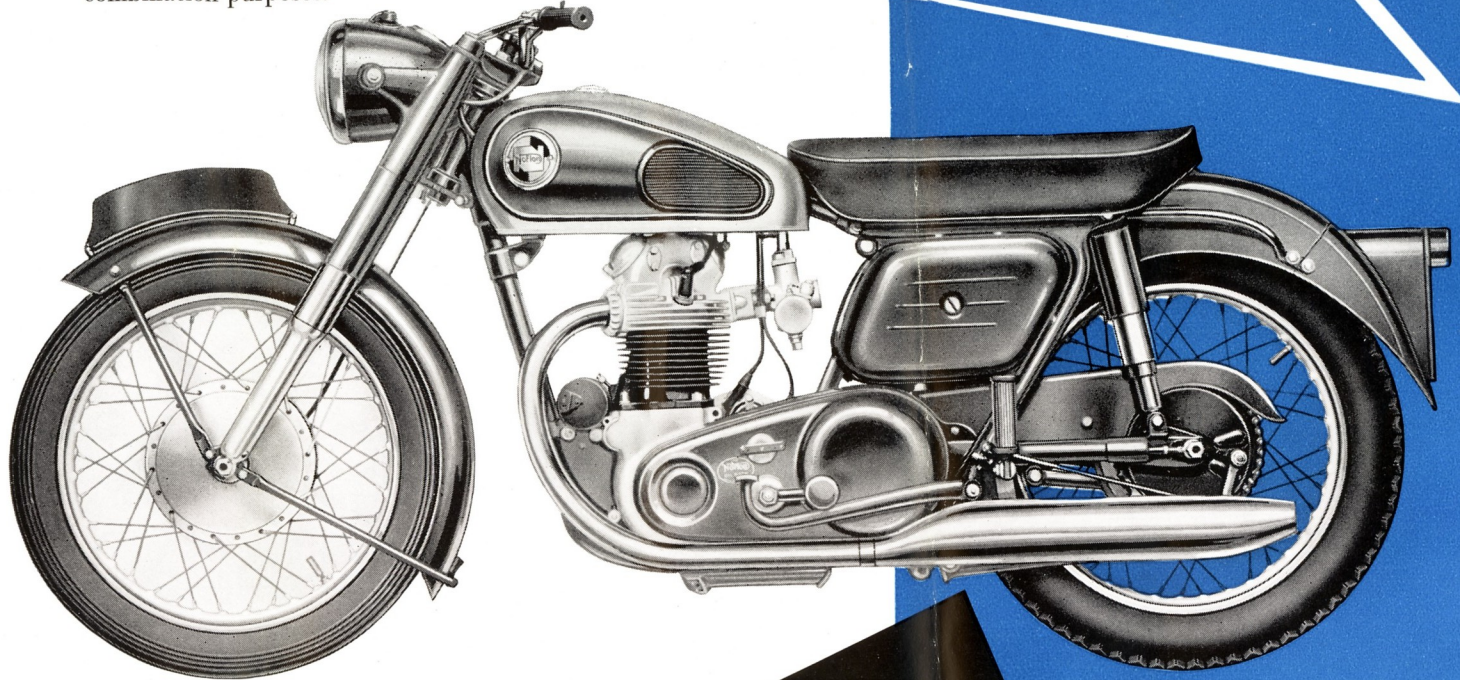
THE WORLDS BEST ROAD

Smooth

MODEL 77

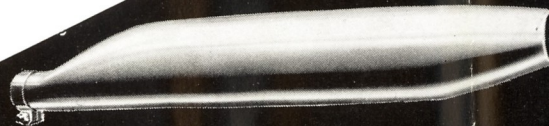
For high performance solo or sidecar work. The Model 77 houses the same famous 600 c.c. twin cylinder engine as the 99, but the frame layout makes it particularly attractive for combination purposes.

MODEL 77
600 c.c. O.H.V.
Vertical Twin



SILENCER

The entirely new 'Smooth-Look' silencer based on accepted acoustical principles ensures freedom from obtrusive exhaust noise on the widest of throttle openings.



HOLDERS ALL HAVE THE
-Look'

FRONT HUB

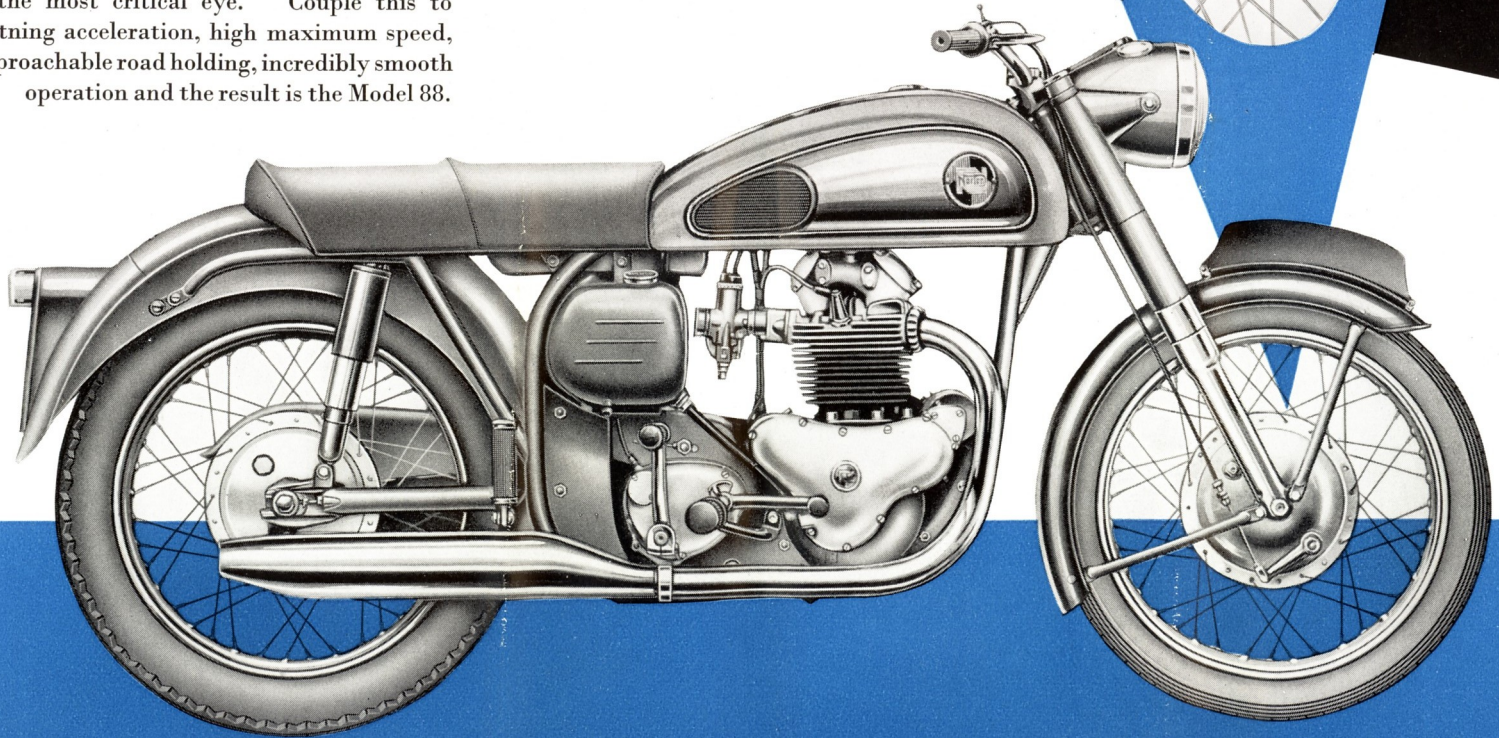
Re-designed front hub having still more efficient braking characteristics than its forerunner. Easy in operation, light in weight and stylish in design.

MODEL 88

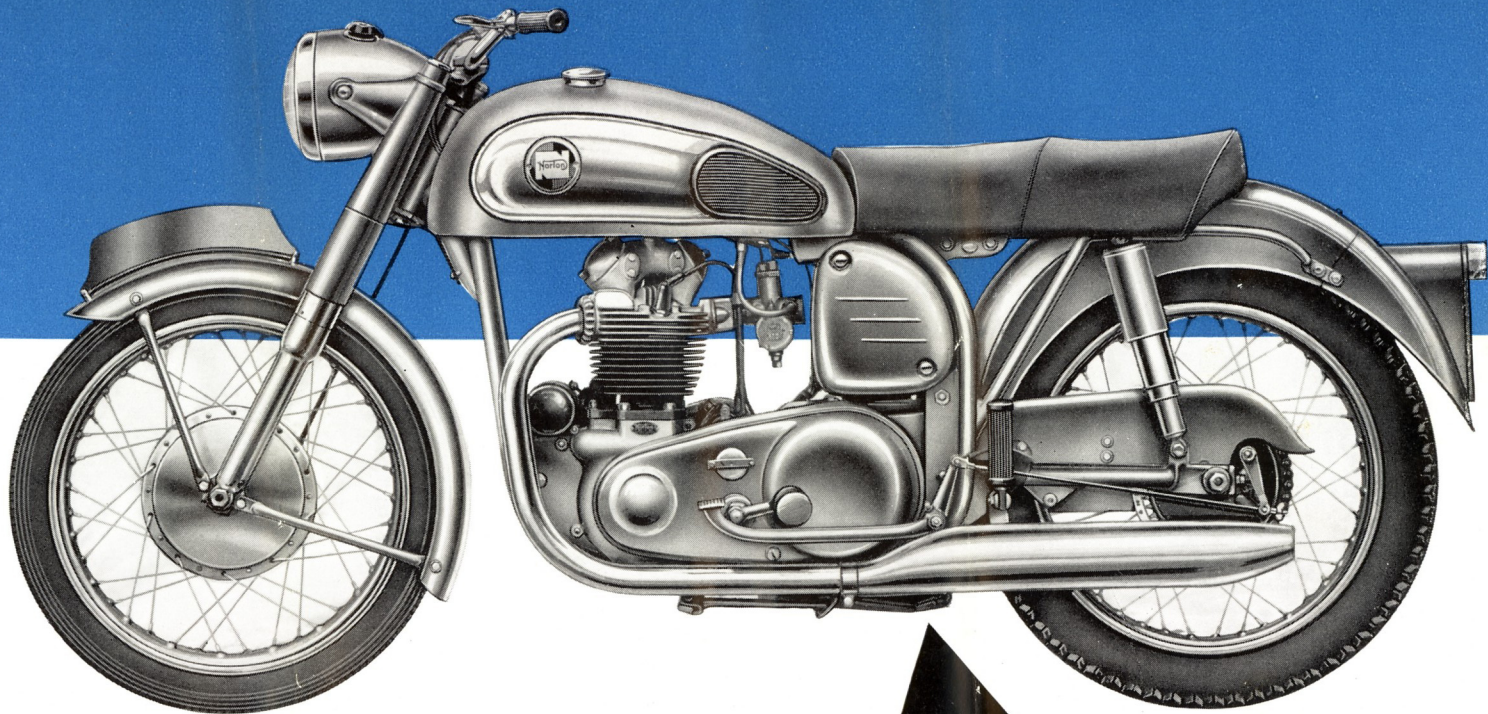
500 c.c. O.H.V.
Vertical Twin

MODEL 88

The distinctively modern and sporting yet dignified appearance immediately satisfies the most critical eye. Couple this to lightning acceleration, high maximum speed, unapproachable road holding, incredibly smooth operation and the result is the Model 88.



THE *Smooth-Look* NORTONS



MODEL 99

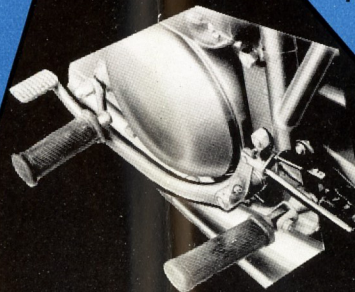
Having all the desirable attributes of the Model 88 plus that extra power and performance provided by the 600 c.c. engine, the Model 99 is in a class of its own.

For really outstanding solo performance with the highest possible degree of safety your choice will be the Model 99.

MODEL 99
600 c.c. O.H.V.
Vertical Twin

REAR BRAKE PEDAL

The care which has been devoted to detail refinement is exemplified in the concealed brake pedal return spring, adjustable stop and brake light operation. This is yet another 'Smooth-Look' feature.



BUILT IN THE LIGHT OF EXPERIENCE

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 $\frac{3}{8}$ " \times $\frac{1}{2}$ ". 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 construction, 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" \times 19", rear studded 3-50" \times 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 7 $\frac{1}{2}$ 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.

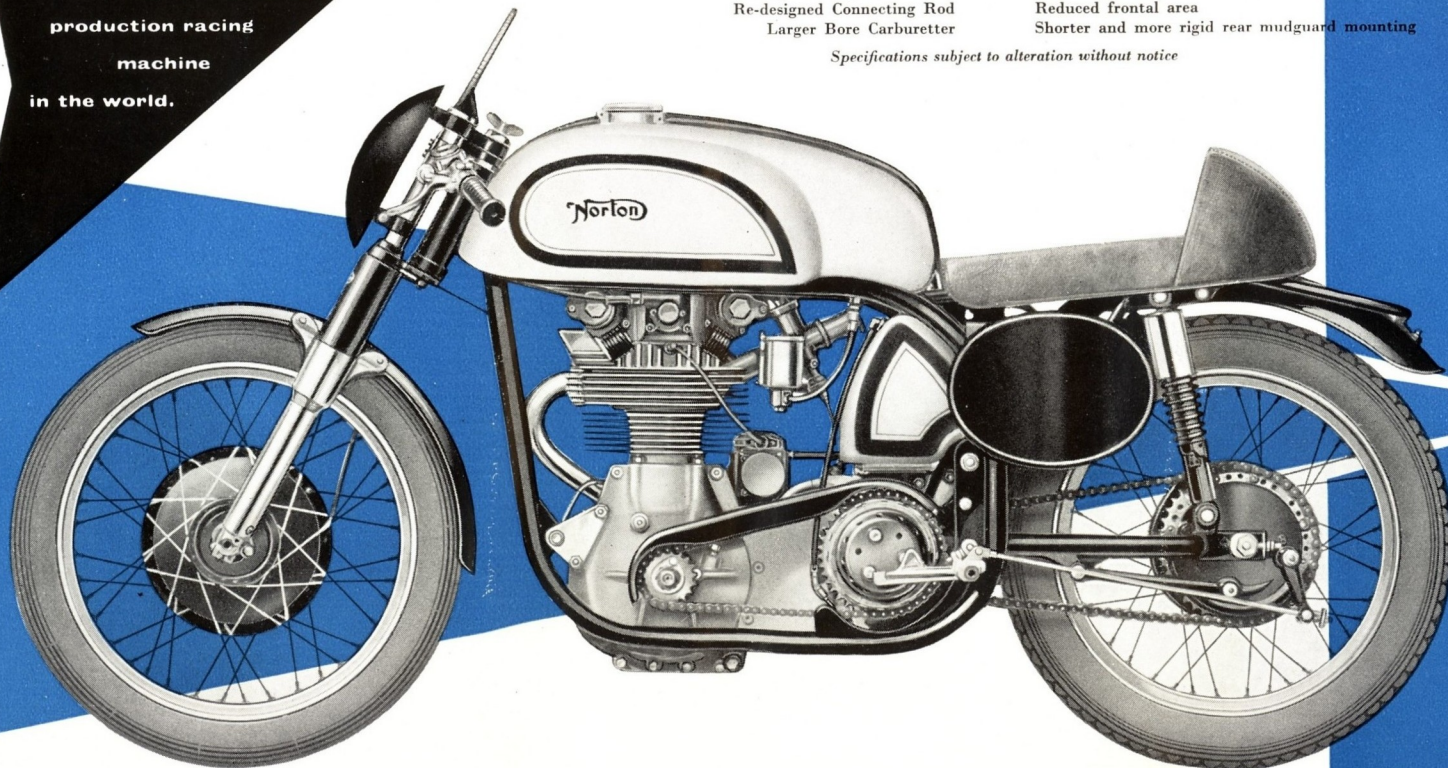
OTHER EQUIPMENT : Sponge rubber racing seat with back rest, Wire gauze fly screen, Racing number plates, Megaphone exhaust.

1957 MODIFICATIONS

Sodium cooled Inlet Valve
Higher Compression ratio
Re-designed Connecting Rod
Larger Bore Carburetter

Re-designed Bevels
Improved front and rear Hubs
Reduced frontal area
Shorter and more rigid rear mudguard mounting

Specifications subject to alteration without notice



ISLE OF MAN

INTERNATIONAL SENIOR T.T. RACE
Manufacturers' Team Prize:
J. Hartle, J. Brett and A. Trow

SOUTHERN "100" ROAD RACE

350 c.c. 1st R. McIntyre
2nd D. V. Chadwick
3rd T. S. Shepherd
500 c.c. 1st T. S. Shepherd
2nd D. G. Chapman
3rd E. J. Washer

GT. BRITAIN

"DAILY HERALD"

NATIONAL TROPHY MEETING

350 c.c. 1st R. McIntyre
2nd A. King
3rd J. Hartle
500 c.c. 1st R. McIntyre
2nd J. Brett
3rd T. S. Shepherd

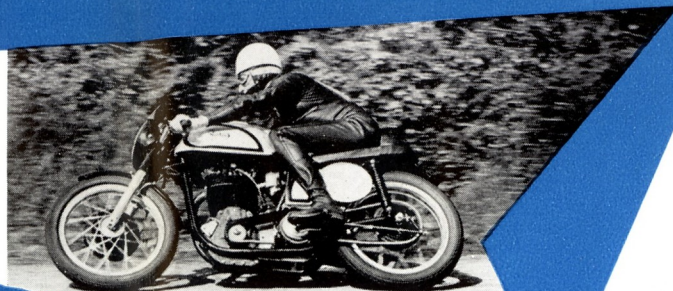
IRELAND

ULSTER GRAND PRIX

350 c.c. Manufacturers' Team Award
500 c.c. 1st J. Hartle
Manufacturers' Team Award

INTERNATIONAL NORTH-WEST "200"

500 c.c. 1st R. Anderson
2nd G. B. Tanner
3rd D. G. Chapman



J. HARTLE

SOUTH AFRICA

PORT ELIZABETH "200"

500 c.c. 1st E. Grant
2nd S. Setaro
3rd J. Gray

NEW ZEALAND

NEW ZEALAND T.T.

350 c.c. 1st D. Hollier

SOME OF THE NORTON SUCCESSES IN 1956

NATIONAL ROAD RACE MEETING— THRUXTON

350 c.c. 1st R. Keeler
2nd I. Lloyd
3rd G. Tanner
500 c.c. 1st R. Keeler
2nd G. Tanner
3rd I. Lloyd

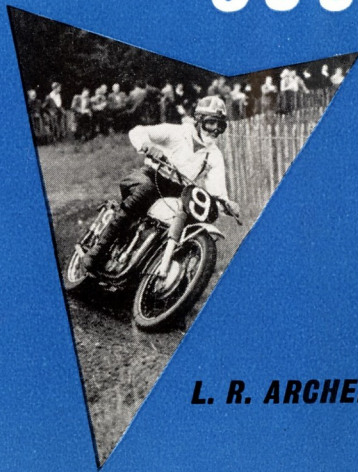
"HUTCHINSON 100"

350 c.c. 1st J. Brett
2nd R. McIntyre
3rd J. Hartle
500 c.c. 1st J. Hartle
2nd R. McIntyre
3rd J. Brett

"MOTOR CYCLING'S" SILVERSTONE SATURDAY B.M.C.R.C. Championship

350 c.c. 1st J. Hartle
490-1,000 c.c. Sidecar
1st P. V. Harris
2nd R. Mitchell
3rd W. Boddice

MOTO-CROSS WORLD CHAMPION L. R. ARCHER



L. R. ARCHER

FRANCE

BOL D'OR 24-HOUR RACE

1st C. Lefevre—seventh consecutive win

SPAIN

GRAND PRIX OF MADRID

500 c.c. 1st F. Gonzalez
Sidecar event 1st E. Strub

SWEDEN

SWEDISH GRAND PRIX

350 c.c. 1st K. R. Campbell
2nd J. Hartle, Record lap
3rd J. Brett

SAAR

SAAR GRAND PRIX. ST. WENDEL

350 c.c. 1st E. Hinton
2nd E. Grant
3rd K. Campbell
500 c.c. 1st K. Campbell
2nd J. A. Storr
3rd L. Aislabie

WINNER OF **32** T.T. RACES

GENERAL SPECIFICATION

ENGINES

TWIN CYLINDER

Both 500 c.c. and 600 c.c. capacities follow the same lines. A built-up crankshaft assembly having plain Vandervell big ends is carried on large, rigid ball and roller bearings in an immensely strong light alloy crankcase. The heavily finned cylinder head is of aluminium alloy with widely spaced exhaust ports and overhead valves operated by light alloy pushrods from a single chain driven camshaft across the front of the engine.

SINGLE CYLINDER

All three sizes, 350 c.c., 500 c.c. and 600 c.c. are basically the same. All employ overhead valves in light alloy cylinder heads with cast in valve seats and light alloy push rods operated by two camshafts mounted on plain bearings. The rigid, built up flywheel assembly is carried in two roller and one ball journal bearing. High tensile steel connecting rods with double row roller big ends are used.

LUBRICATION

All engines are lubricated on the dry-sump system, oil carried in a separate tank being circulated through the engine under pressure and returned to the tank. A very efficient gear pump capable of generating pressure many times in excess of that required

for effective lubrication is used. Filters in strategic positions ensure cleanliness.

GEARBOX

Four speeds with carefully chosen ratios selected by a positive foot operated mechanism provide suitable transmission for all circumstances. Short rigid shafts and wide gear teeth ensure silent operation.

FRAME

All frames are made from solid drawn steel tube with steel or malleable iron lugs welded or brazed in position. Accurately jig built and enormously strong. Pivoted fork rear suspension operating on silent bloc bushes requiring no maintenance on all road models.

FORKS

Norton "Roadholder" oil damped, telescopic forks with heavy gauge large diameter main tubes and light alloy sliders. Springs available for solo or sidecar.

WHEELS

Full width, light alloy, die cast hubs running on rigid ball journal bearings and having 8-in. and 7-in. diameter drums on front and rear wheels respectively. Rear wheel quickly detachable without disturbing chain.

TRANSMISSION

Multi-plate clutch incorporating rubber buffer vane-type shock absorber is housed in primary oil bath chaincase. Deep and efficient guard provided for rear chain.

MUDGUARDS

Designed to give full protection, the rear is valanced and has detachable tail piece.

IGNITION

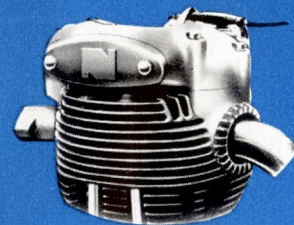
On twin cylinder engines a Lucas flange fitting magneto with automatic advance and retard is used. A Lucas Magdyno with manual control is fitted to single cylinder engines.

HANDLEBARS

Fully adjustable for angle and height, the controls are also adjustable individually. Heavily chromium plated, $\frac{3}{8}$ -in. diameter fitted with plastic grips.

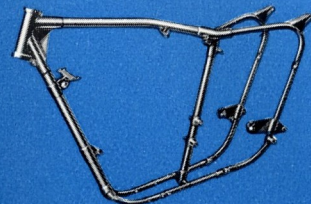
FINISH

Enamelled parts triple coated in high quality stoved black or polychromatic grey according to model. Bright fittings heavily chromium plated. Certain light alloy parts acid dipped or bright polished.



CYLINDER HEAD

'Smooth-Look' rocker box and redesigned cylinder head with new induction tract and carburetter attachment flange.



FRAME

The new high tensile steel frame for models 50, E.S.2 and 19S retains the lateral rigidity always associated with the name NORTON whilst being lighter and more modern in conception.

TABULATED SPECIFICATIONS

MODELS	50	E.S.2	19S	77	88	99	30M	40M	MODELS
Bore and Stroke (m/m)	71 × 88	79 × 100	82 × 113	68 × 82	66 × 72.6	68 × 82	86 × 85.62	76 × 76.7	Bore and Stroke (n./m)
Cylinder Capacity	348 c.c.	490 c.c.	596 c.c.	597 c.c.	497 c.c.	597 c.c.	499 c.c.	348 c.c.	Cylinder Capacity
Compression Ratio	7.3	7.1	6.4	7.4	7.8	7.4	9.75	10.0	Compression Ratio
Valves	O.H.V.	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	*4.53	4.75	4.53	4.23	5.12	Gear Ratio. Top
" " Third	7.04	6.31	6.65	6.04	6.31	6.04	4.65	5.64	" " Third
" " Second	9.36	8.41	8.85	8.03	8.41	8.03	5.63	6.81	" " Second
" " Bottom	14.12	12.7	13.35	12.1	12.7	12.1	7.52	9.11	" " Bottom
Saddle Height	31"	31"	31"	31"	31"	31"	30"	30"	Saddle Height
Wheel Base	57"	57"	57"	56"	55½"	55½"	55"	55"	Wheel Base
Overall Length	87"	87"	87"	86"	85½"	85½"	80½"	80½"	Overall Length
" Width	29"	29"	29"	29"	26½"	26½"	22"	22"	" Width
Ground Clearance	6½"	6½"	6½"	6½"	6½"	6½"	5½"	5½"	Ground Clearance
Weight	377	384	388	402	390	395	313	307	Weight
Petrol Tank Capacity	3 Gal.	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.	4 Pts.	4½ Pts.	4½ Pts.	7½ Pts.	7½ Pts.	Oil Tank Working Capacity
Tyre Size—Front	3.25 × 19	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	3.50 × 19	" " —Rear
Brake Dimensions	Front 8" dia. × 1¼" wide. Rear 7" dia. × 1¼" wide.						Front 8" dia. × 1¼" wide. Rear 7" dia. × 1¼" wide.		Brake Dimensions
Chains	½" Pitch × .305" wide front. ⅜" Pitch × ¼" wide rear.						½" Pitch × .305 wide front. ⅜" Pitch × ¼" wide rear.		Chains

* AVAILABLE ALSO WITH SIDECAR GEARS 5, 6.65, 8.85 and 13.35.

Norton

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 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.

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